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ENERGY AND WATER DEVELOPMENT APPROPRIATIONS FOR 1996

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BEFORE A

SUBCOMMITTEE OF THE
COMMITTEE ON APPROPRIATIONS
HOUSE OF REPRESENTATIVES

ONE HUNDRED FOURTH CONGRESS

FIRST SESSION

SUBCOMMITTEE ON ENERGY AND WATER DEVELOPMENT

JOHN T. MYERS, Indiana, *Chairman*

HAROLD ROGERS, Kentucky	TOM BEVILL, Alabama
JOE KNOLLENBERG, Michigan	VIC FAZIO, California
FRANK RIGGS, California	JIM CHAPMAN, Texas
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JIM BUNN, Oregon	

NOTE: Under Committee Rules, Mr. Livingston, as Chairman of the Full Committee, and Mr. Obey, as Ranking Minority Member of the Full Committee, are authorized to sit as Members of all Subcommittees.

JAMES D. OGSBURY, BOB SCHMIDT, and JEANNE WILSON, *Staff Assistants*

PART 1

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South Atlantic Division	843
Lower Mississippi Valley Division	1057

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ENERGY AND WATER DEVELOPMENT APPROPRIATIONS FOR 1996

HEARINGS

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HOUSE OF REPRESENTATIVES

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89–505 WASHINGTON : 1995

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ENERGY AND WATER DEVELOPMENT APPROPRIATIONS FOR 1996

TUESDAY, FEBRUARY 21, 1995.

DEPARTMENT OF THE ARMY

CORPS OF ENGINEERS

OFFICE OF THE ASSISTANT SECRETARY OF THE ARMY (CIVIL WORKS) AND CHIEF OF ENGINEERS

WITNESSES

DR. JOHN H. ZIRSCHKY, ACTING ASSISTANT SECRETARY OF THE ARMY (CIVIL WORKS)

LT. GEN. ARTHUR E. WILLIAMS, CHIEF, CORPS OF ENGINEERS

MAJ. GEN. STANLEY G. GENEGA, DIRECTOR OF CIVIL WORKS

DON B. CLUFF, CHIEF, PROGRAMS MANAGEMENT DIVISION, DIRECTORATE OF CIVIL WORKS

Mr. MYERS. The committee will come to order. This is the first official session of the 1996 appropriations process. We are pleased to welcome the Secretary and the generals. At this time I will recognize Mr. Bevill, who has been the long-time Chairman here for a good many years. He reluctantly turned his gavel over to me, but he didn't leave any money.

Mr. BEVILL. I have told people in my district that Mr. Myers and I have been sitting by each other for 20 years, and we are just swapping seats. I did hate to swap seats with him and I am going to miss the big high-backed chair that was so comfortable. Really, that is the biggest obstacle I have faced so far, but then being the gentleman he is, when I came to some hearings the other day, this is our first official one, those were sort of unofficial, I guess, John, I looked around there and my high-backed chair was gone. And I asked him what happened to it. I was really concerned. I never had to sit down in one of these little chairs before. I didn't know whether I could sit in one or not.

I found out they are very comfortable, really, so really no problem. I asked John what has happened to the high-backed chair. He said, "I sold it." I said, "What did you do with the money?" He said, "I applied it to the national debt."

So it is good to see all of you back, general, and Mr. Secretary, and all of you. We look forward to hearing from you. We are the only people in Washington that brag on your good work, so you ought to appreciate us, and you do do a good job really. More people ought to be bragging on you.

Mr. MYERS. We hope to continue to be bragging on you, too, in the future. It all depends on both of us, I guess, working together. Well, the spirit of cooperation that Tom Bevill and I have had through the years is going to continue under the new Chair, even if we don't have the big, high-backed chair here. I never noticed he had the big chair. He called me from Alabama after the results of November 8th. He called it a debacle.

Mr. BEVILL. I think he had his eyes on it all the time.

Mr. MYERS. He said, you know, I don't mind turning that gavel over to you, but I really hate to give up that big chair. I never noticed he had a high-backed chair, so we took care of that rather quickly. But, Tom, we hope you enjoy that chair as long as I have enjoyed it.

Mr. BEVILL. It is very comfortable. In some ways it is more comfortable.

Mr. MYERS. He has had 18 years of the high chair, so I hope now he has 18 years of the lower chair.

Mr. BEVILL. Turnabout is fair play.

Mr. MYERS. At this time, Mr. Secretary, are you going to lead off here? The committee is pleased to hear from you. Since this is your first time before the committee we will include your biographical sketch in the record.

[The information follows:]

RESUME OF SENIOR EXECUTIVE SERVICE
OF
JOHN H. ZIRSCHKY

PRESENT ASSIGNMENT: Acting Assistant Secretary of the Army
(Civil Works)
108 ARMY PENTAGON
WASHINGTON, DC 20310-0108

DATE ENTERED SES: 2/22/94 TOTAL CIVILIAN SERVICE: 4

PROTOCOL PRECEDENCE CODE (PPC): 4

FEDERAL EMPLOYMENT HISTORY:

FROM	TO	POSITION
2/22/94	Present	Acting Assistant Secretary of the Army (Civil Works)
1993	1994	Professional Staff Member, Senate Committee on Environment and Public Works, Washington, DC
1990	1993	Legislative Assistant, Office of Senator Jeffords, Washington, DC

MILITARY SERVICE: None

EDUCATION DEGREES:

University of Tennessee Knoxville, Tennessee	B.A.	Civil Engineering
Utah State University Logan, Utah	M.S.	Engineering
Clemson University Clemson, South Carolina	Ph.D.	Engineering

HONORS AND AWARDS:

-- Member of the engineering honorary societies Tau Beta Pi and Chi Epsilon
-- Member of Sigma Xi, a scientific research honor society
-- Member of Water Environment Federation, American Society of Civil Engineers
-- Member of the Public Water Supply Council, American Water Works Association
-- More than 40 publications on various aspects of civil and environmental engineering
-- Registered Professional Engineer: South Carolina

DR. ZIRSCHKY'S STATEMENT

Mr. ZIRSCHKY. Yes, sir. Thank you, Mr. Chairman, Mr. Bevill. We welcome that cooperative spirit of working together and any time you want to brag on us, feel free. Thank you for the opportunity to testify today.

Accompanying me is Lieutenant General Art Williams, the Chief of Engineers, Major General Stanley Genega, the Director of Civil Works and Mr. Don Cluff, the Chief of Programs. With your permission, we will summarize our statements and ask that our full statements be included in the record.

Mr. MYERS. Your prepared statement will be in the record. We would be pleased to hear from your summary.

Mr. ZIRSCHKY. The Army's budget for fiscal year 1996 proposes $3.675 billion, of which $3.32 billion is in new appropriations and $357 million is programmed carryover from prior fiscal years. It is a 3 percent reduction from the previous fiscal year in new appropriations.

Mr. Chairman, we tried very hard to put together a sound budget. For example, every dollar that you invest in the new construction starts in this budget will return $2.21 to the national economy. For every remaining dollar invested in our ongoing projects, it will return about $6.33 to the national economy.

For every dollar you invest in our design process, those projects, if built, will return $2.10 to the national economy. Every dollar you invest in our recreation program, we will be able to return $10 to the national economy, and for every dollar that you appropriate for us to maintain the inland waterways, we believe will save over $11 in the cost of transporting goods in this country.

PROGRAM PERFORMANCE

Before we discuss our fiscal year 1996 priorities, let me speak briefly about our performance. Performance and performance measurements are a key tenet of the National Performance Review, and we look forward to working with the committee on improving our performance.

Mr. Chairman, we had some problems in fiscal year 1994 with our performance. We executed approximately 72 percent of our program, which represents a 15 percent decrease from fiscal year 1992 and a 2 percent decrease from fiscal year 1993. There are a number of reasons for this decrease.

We believe that the announcement of the 1992 reorganization plan was a key factor and that it hurt morale, and as private sector industries have shown, when you go through a downsizing, morale suffers and productivity suffers.

Our capacity to produce decreased about $300 million in fiscal year 1993. We turned that around and increased our output by $400 million, but we carried over so much money from fiscal year 1993 that it made our execution look like it decreased. We committed to six goals in fiscal year 1995 to improve our performance. We look forward to working with the committee in the execution of those goals.

The first one was restructuring, which is now in its 10th month. We are looking at our roles, our missions, our business processes, and our infrastructure. Under this restructuring, for example, my office is reorganized. We have eliminated 40 percent of our senior executive service jobs and cut our costs approximately 18 percent this year.

A second goal is to improve our business processes. For example, we have reinvented our Section 14 Continuing Authorities Program, and with the new process combined with more effective implementation, we have cut 2.5 years off of these $500,000 projects.

Third, we want to improve our fiscal accountability. Your reports last year indicated our need for this and we are working with the Army Audit Agency to improve our fiscal management.

Fourth, we want to improve performance measurement and accountability. At present, the Office of the Assistant Secretary has no means to routinely track performance of the Civil Works Program. It is not clear that we have ever had such a means. One of our goals is to develop a process where we routinely monitor the program performance. We look forward to working with you in what measures we would monitor. Once we get that system in place we want to then ensure that our personnel performance evaluations reflect the actual program performance.

The fifth goal is to ensure support for key administration policies. Under that, we conducted a review of our environmental missions. And sixth, we want to increase the public's awareness of the Army's contributions to America.

Mr. Chairman and members of the committee, we would be happy to brief you at any time on those activities.

FY 96 BUDGET REQUEST

Let me talk now about the fiscal year 1996 appropriations request. The $3.32 billion in new appropriations includes $156 million for general investigations, $785 million for construction general, $1.749 billion for operation and maintenance general, $112 million for the regulatory program, $319 million for flood control, Mississippi River and tributaries, and $197 million for other accounts.

The President's proposed budget for fiscal year 1996 focuses our efforts on missions of national significance, which includes commercial navigation, interstate flood control, research and development, and assistance to State, local and tribal governments. Under the President's proposal for Reinventing Government, the Corps will phase out of local flood control and storm damage reduction projects and work to transfer other responsibilities to the States.

We have some new surveys and new areas we want to explore in fiscal year 1996. One is a national assessment of water supply demand and availability. We want to do a nationwide assessment of the availability of water to help State and local governments plan for their water supply needs in the future.

Mr. Chairman, we wrote to you on February 7th asking to reprogram half a million dollars in a fiscal 1995 budget to help us scope the study so we can begin it in fiscal year 1996.

Some other new initiatives that reflect our reinvention, we have a proposed increase funding for the Section 22 planning assistance to States programmed to the full authorized amount of $6 million. We want to increase funding for the floodplain management services to the full authorized level of $15 million. We want to increase our Section 1135 Environmental Restoration Program to its annual ceiling of $25 million.

We want to increase funding for the Section 204 Beneficial Reuses of Dredged Materials Program to $15 million. We believe that this program will help us break some of the logjam on our dredging projects.

New initiatives, we believe, will save $29 million in fiscal year 1996 and $960 million cumulatively through fiscal year 2000. In keeping with the administration's philosophy of providing the American public with cost-effective service at all levels of government, we are proposing a significant change in the Federal participation in water resources projects.

Mr. Chairman, we are faced with two options. The first is to, given our budget realities, is to cut all our programs. The second option is to focus on the critical missions of national importance and to do those well. The latter is our preference. We prefer to focus on a few missions and do those well rather than to face a salami slice cut across all our programs.

We propose that the Corps maintain its focus on projects of broad national scope and significance, as I mentioned, including commercial navigation and inland navigation, emergency response, and interstate flood control projects. We propose that the Corps complete whatever phase the current projects are in. That means the savings this year will not be great, but in outyears the savings will increase substantially.

The proposed criterion for maintaining a Federal role in flood control are that more than half the flood waters will have to originate from outside the State. The project would have to have a benefit cost ratio of 2 to 1 and the local sponsor would have to pay 75 percent of the cost. This policy, we believe, would result in improved floodplain management, watershed planning, and more effective zoning.

Other measures to achieve savings after fiscal year 1996, we are going to propose to eliminate the Aquatic Plant Control Program, terminate funding for new continuing authorities projects, work with local authorities to turn over the operation and maintenance of local protection projects and the maintenance of harbors that do not contribute to the Harbor Maintenance Trust Fund. We also want to work closely with the Environmental Protection Agency to help the States assume the Section 404 regulatory program.

CONCLUSION

In conclusion, Mr. Chairman, I want to emphasize the stringent principles we have applied in determining our requirements for new appropriations for fiscal year 1996, and these measures will take us halfway towards our goal of deficit reduction. We look forward to working with you and ask for your continued support as we streamline and restructure the Corps of Engineers. Thank you, Mr. Chairman, and members of the committee.

[The prepared statement of Dr. Zirschky follows:]

COMPLETE STATEMENT

OF

JOHN H. ZIRSCHKY

ACTING ASSISTANT SECRETARY OF THE ARMY (CIVIL WORKS)

BEFORE THE

SUBCOMMITTEE ON ENERGY AND WATER DEVELOPMENT

COMMITTEE ON APPROPRIATIONS

UNITED STATES HOUSE OF REPRESENTATIVES

ON THE

FISCAL YEAR 1996 CIVIL WORKS BUDGET

FEBRUARY 21, 1995

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STATEMENT OF JOHN H. ZIRSCHKY
ACTING ASSISTANT SECRETARY OF THE ARMY (CIVIL WORKS)
BEFORE THE SUBCOMMITTEE ON ENERGY AND WATER DEVELOPMENT
COMMITTEE ON APPROPRIATIONS
UNITED STATES HOUSE OF REPRESENTATIVES
ON THE FISCAL YEAR 1996 CIVIL WORKS BUDGET

Mr. Chairman and Members of the Subcommittee:

INTRODUCTION

Thank you for the opportunity to testify today on the proposed Fiscal Year (FY) 1996 budget for the Civil Works program of the Army Corps of Engineers. I am John H. Zirschky, Principal Deputy and Acting Assistant Secretary of the Army for Civil Works. Accompanying me are Lieutenant General Arthur E. Williams, the Chief of Engineers, Major General Stanley G. Genega, the Director of Civil Works; and Don B. Cluff, Chief of the Civil Works Programs Management Division.

The President's budget for the Civil Works program for FY 1996 is $3.675 billion, which is comprised of $3.32 billion in new appropriations and $357 million in programmed carryover from prior years. This is approximately equal to the FY 1995 level, which included $3.42 billion in new appropriations and $250 million in programmed carryover. The increase in the portion of the Civil Works budget that would be financed from programmed carryover, in lieu of new appropriations, is necessary to improve our budget execution. The table attached to this statement shows the request for new appropriations, by account and source of funding, along with anticipated non-Federal contributions.

BENEFITS OF THE CIVIL WORKS PROGRAM

We have worked hard to put together a sound budget. Although I can't give you one overall benefit-to-cost ratio for the entire Civil Works program, the benefits of the program are well documented. I would like to highlight some examples of the economic benefits associated with our program.

- For every dollar invested in the new construction starts and new major rehabilitations we have budgeted for FY 1996, we estimate $2.21 in national economic benefit will result. For every dollar remaining to be invested in construction of the ongoing projects in our program for which benefits have been estimated in monetary terms, the country will receive $6.33 in economic benefit.

- The economic costs and benefits just cited do not include our proposed investment of $106 4 million in continuing construction of environmental projects, including the Salmon Recovery program in the Pacific Northwest, whose benefits, although not calculated in monetary terms, are judged to at least equal their costs.

- Continuing and new projects budgeted for preconstruction engineering and design (PED) will, if constructed, produce $2.10 in national benefits for every dollar spent.

- Our research and development program is estimated to return $6 for every dollar invested.

- There are many examples of the benefits of continued operation and maintenance (O&M) of Corps projects. On average, each dollar spent on O&M of recreation areas at Corps projects produces $10 in direct recreation benefit to the public, based on administratively established recreation user day values and recent visitation statistics for Corps projects.

- According to a study completed in 1990, updated for current data, every dollar spent on O&M of the existing inland waterway system results in savings of about $11.55 in the cost of transporting goods.

We continually strive to improve our efficiency through value engineering and through pursuit of innovative construction techniques. For example, in May of last year, the Louisville District in the Ohio River Division of the Corps decided to pursue an innovative method of constructing a lock and dam that was initially identified in the April 1994 report of the Corps Task Force on Design and Construction Innovations for Locks and Dams. This innovative design and construction plan will use precast concrete elements, eliminating the need for a temporary cofferdam, saving about 2 years in construction time and reducing construction costs on the dam by an estimated $50 million.

PERFORMANCE IN THE CIVIL WORKS PROGRAM

Before I discuss our priorities for FY 1996, I would like to briefly discuss our ongoing efforts to improve the performance of the Civil Works program. It is important that we effectively execute the programs and projects for which you provide the funds. Let me also stress that we are committed to working with this Committee in implementing the National Performance Review and the Government Performance and Results Act and in improving our performance.

Performance measurement is a key tenet of the National Performance Review. I cited examples of economic return from the Civil Works program because we are placing a high priority on our current effort to use performance measures. In all honesty, Mr. Chairman, we are having problems with mission execution. In FY 1994, we executed approximately 72% of the funded program, including carry-over from the preceding fiscal year. This represents decreases of 15% from FY 1992 and 2% from FY 1993. We are very concerned about this decrease in performance and have taken measures to correct this problem. Our currently projected execution rate for FY 1995 is about 83%. We believe we have stopped the slide in performance and are poised for improvements.

The decrease in execution began in FY 1993 when our apparent production capacity decreased by about $300 million. There appear to be a number of reasons, but we believe a significant factor was the previous reorganization plan, which dramatically affected morale. Our productivity stabilized in 1994 and our output increased by approximately $400 million, but the large carry-over of funds from FY 1993 into FY 1994 still caused our overall execution rate to decrease. We are optimistic that we can work off the accumulated carry-over in FY 1996 and FY 1997. To get through this transition, however, we have had to adjust our planning, design and construction schedules.

To improve our performance, we committed to six goals in FY 1995. This commitment represents, I believe, a significant step toward a more cooperative relationship between the Corps and the Office of the Assistant Secretary. Shortly, I would like to make another step by proposing six possible goals for FY 1996. We seek a cooperative relationship with Congress in developing and pursuing these goals. By working together, we believe we can continue to improve our performance First, however, let me briefly review the six goals for FY 1995.

PERFORMANCE GOALS FOR FY 1995 AND FY 1996

Restructuring is the first goal. We are now in our tenth month of the current effort to restructure the Corps. The current effort focuses on four areas: roles, missions, business processes, and infrastructure. Examples of activities we have completed include a roles matrix which outlines the respective roles of the Assistant Secretary's office and the Corps Headquarters, divisions and districts; a new technical review process; a new policy review process; and new division organizational guidelines. We have completed a review of our environmental mission, redesigned several business processes, and evaluated our dredge fleet.

A second goal is to improve our business processes. While actually a subset of restructuring, we listed it as a separate goal to focus on the need to find better ways to provide our products. We have redesigned the business process of the Section 14 program, one of our continuing authorities programs, and in doing so have cut over 2.5 years off the process. We also have substantially streamlined the Section 1135 process, which will produce a more efficient and effective program

Third, we need to improve our fiscal accountability. The reports of this committee last year highlighted this need. While we have made substantial progress, we still have work to do in this area The Army Audit Agency is assisting us in improving our fiscal accountability.

Fourth, we want to develop and improve upon our performance measurement and accountability. At present, the Office of the Assistant Secretary has no overall system to routinely track the performance of the Civil Works program. It is not clear that such has ever existed. We are going to develop a means that all levels of the Corps, including my office, can use to monitor performance. We would welcome your assistance in this effort. We then want to use this system to ensure that personnel performance evaluations reflect the program performance.

Fifth, we want to ensure key Administration policies are implemented. Our efforts to evaluate our environmental missions are an example of an activity conducted pursuant to this goal.

Sixth, we want to increase public awareness of the Corps' and the Army's contributions to America. A public awareness plan has been prepared and is being implemented.

We anticipate that focused efforts to improve our fiscal accountability and public awareness will be completed in FY 1995 and maintained thereafter. Thus, we would continue our efforts on the following goals in FY 1996: restructuring, improvements in Civil Works processes, improved performance measures and accountability, and the pursuit of Administration goals.

Mr. Chairman, Members of the Committee, we would welcome the opportunity to discuss these goals with you at any time.

OVERVIEW OF THE CIVIL WORKS BUDGET

The $3.32 billion requested in new appropriations includes $155.6 million for General Investigations; $785.1 million for Construction, General; $1.749 billion for Operation and Maintenance, General; $112 million for the Regulatory Program; $319.2 million for Flood Control, Mississippi River and Tributaries; and $197 million for other accounts. Nearly 18 percent of the FY 1996 budget would be derived from user fees, including $6 million in the Regulatory Program subject to enactment of proposed legislation. Moreover, this budget would be supplemented by an estimated $312 million in non-federal cash contributions through the Rivers and Harbors Contributed Funds account.

The President's proposed budget for the Civil Works program will focus our efforts on missions of national significance. These include commercial navigation, interstate flooding, technical assistance to States and Tribal governments, and environmental restoration. The Corps of Engineers prodigious technical capability also will continue to be available on a reimbursable basis to provide engineering and construction management for other Federal agencies in carrying out their nationally significant missions.

NEW STARTS AND NEW INITIATIVES IN FY 96

The FY 1996 Civil Works budget includes $10.3 million for 2 construction new starts, 6 major rehabilitation new starts and a new separable element of a project already under construction. The budget also includes $10.1 million for 31 new surveys and $1.5 million to initiate 5 preconstruction engineering and design projects. The total Federal commitment associated with initiating these projects and studies is $353 million. Attached to this statement are maps showing the geographic location of these new starts.

Among the new surveys for which we are requesting funding is a National Water Supply Demand and Availability Study. This study will help regional, state, and local governments plan for the water supplies they will need in the future. The last such comprehensive survey was done in 1975 by the Water Resources Council (WRC). Recent analysis by the Corps and the U. S. Geological Survey has confirmed that the low-use scenario predicted nearly 20 years ago by the WRC reflects the actual water use since that time. Notwithstanding this fact, our economic growth and increased sensitivity to the need to ensure sufficient water for healthy ecosystems, combined with droughts in several regions of the country, have heightened the importance of an adequate water supply. Because of the priority we place on this effort, Mr. Chairman, I wrote to you on February 7 to propose the reprogramming of $500,000 in FY 1995 monies to begin this study.

New initiatives reflected in this budget are fully consistent with the objectives of reinventing the Government and focusing the Civil Works program on nationally significant missions. First, we propose to increase funding for Section 22 Planning Assistance to States to $6 million, the limit of the annual authorization, in order to enable the Corps to make more of its technical expertise available to States and Tribes, to increase coordination with these levels of government, and to assist them in preparing their own comprehensive plans for the conservation, development, and use of their water resources. This program, which is cost shared 50/50, has experienced a significant increase in demand during the last year or two.

Likewise, we proposed to increase funding for Flood Plain Management Services to $15 million, the annual funding ceiling for this program, through which we will help states, Tribes and local governments to develop their own plans and initiate their own actions to mitigate flood losses. Part of this funding will be used to substantially increase technical services to Native Americans and to give special emphasis to assisting Federally Recognized Tribes with flood plain management planning on Indian lands.

We will continue the outreach program begun in FY 1994 to improve government-to-government relationships with Native American Tribes. We will conduct a series of regional workshops with tribal representatives from throughout the Nation to discuss their needs, to identify means to best address them, and to facilitate improved relationships. Some of the Corps districts and divisions already have good working relationships with several Federally Recognized Tribes. Our outreach program will learn from and build on those past successes.

We propose to increase funding for the Section 1135 environmental program to the annual ceiling of $25 million. The purpose of this program is to improve the environment by taking advantage of opportunities to modify the structure or operation of Corps projects. Full implementation of the Section 1135 program in FY 1996 is a key part of our environmental strategy. Already under the Section 1135 program, we have completed 7 projects, 14 more have been approved for construction, and studies are underway on 43 others. Also as part of our environmental strategy, we propose $15 million in FY 1996 for the Section 204 program for Beneficial Uses of Dredged Material.

MAINTAINING CIVIL WORKS FACILITIES

The funds requested in this budget represent a healthy investment in the O&M of our facilities. Our total O&M program, including both Operation and Maintenance, General, and O&M activities funded through Flood Control, Mississippi River and Tributaries, requires 56% of our budget.

Each year, our O&M commitments continue to grow. Fewer resources are available for new investments in our country's infrastructure. If we are to continue to serve the Nation's infrastructure needs, we must find ways to reduce our costs or divest some of the infrastructure. We ask for your support as we study means to reduce our costs.

REINVENTING THE CIVIL WORKS PROGRAM

The budget I have summarized reflects several new proposals for the Civil Works program. Savings from some of these proposals will begin in FY 1996 and increase through the 5-year budget planning period. Savings from other proposals will begin to accrue in about FY 1998. These initiatives, which are part of the President's plan to reduce the deficit, will save $29 million in FY 1996, and $960 million through FY 2000.

In keeping with the Administration's philosophy of providing the American public with cost effective service at all levels of government, we are proposing a significant change in Federal participation in water resources projects and programs. We were faced with two options in meeting our national performance goals and current budget realities -- we could either cut all programs, resulting in none being served well; or we could select the most critical missions from the Federal perspective, and focus on them, resulting in quality service in a smaller arena. We would look to the States and other non-Federal interests to carry on the other missions to the extent needed.

We propose that the Corps maintain its focus on projects of broad national scope and significance, including commercial harbors and inland navigation, emergency response, integrated multi-state flood control projects such as some on the Mississippi River, and flood control projects involving interstate water, although we propose more stringent criteria for new flood control projects We propose that the Corps complete current projects that would be considered local under the new policy, but not begin new ones, achieving increasing savings in the out-years. This would include local flood protection and shoreline damage reduction projects. The criteria for maintaining a Federal role in flood control are: (1) more than half of the damaging flood water must come from outside the boundaries of the state where the damage is occurring; (2) the project must have a benefit-to-cost ratio of at 2 or greater; and (3) the non-federal sponsor must be willing and able to pay 75 percent of the first cost of the project. This policy would likely result in solutions to flood risks increasingly reflecting local priorities, and it could encourage improved flood plain management, watershed planning and more effective zoning.

For work already underway, we intend to complete the current phase of work, but we have not budgeted to continue these activities into the next phase, whether it is a feasibility study, preconstruction engineering and design, or construction. Also, no funding is included in the budget after FY 1995 for the Aquatic Plant Control program, which addresses localized problems.

Included among measures to achieve savings after FY 1996 are the following: termination of funding for new projects under the Continuing Authorities Program, beginning in FY 1997; working with appropriate local authorities to gradually turn over the operation and maintenance of existing local protection reservoirs and the maintenance of harbors that do not contribute to the Harbor Maintenance Trust Fund; and working closely with the Environmental Protection Agency to enable states to begin assuming responsibility for the Section 404 Regulatory Program.

This budget reflects the President's Reinventing Government Initiative, under which all Federal agencies are reexamining their missions. We will continue to examine our programs for additional savings by addressing the Civil Works mission based on "customer" input; asking whether the mission could be accomplished as well or better without Federal involvement; looking for ways to cut costs or improve performance through competition; and ways to put customers first, cut red tape, and empower employees. We are actively participating in this effort and will be keeping the subcommittee fully apprised of our review. We will conduct a thorough review of all Civil Works missions to identify additional candidates for devolution to lower levels of government or privatization and programs that may have already accomplished their intended purpose. We need to be aggressive in pursuing these opportunities in order to meet the further savings for the out-years

LEGISLATION IN SUPPORT OF THE BUDGET

Consistent with the President's efforts to reinvent government, the Administration will shortly propose authorization legislation regarding the Corps Civil Works missions which is consistent with the President's budget for Civil Works. In proposing this legislation we are ensuring a full discussion on the Administration's proposed future direction of Corps water resources projects and programs

In addition to these legislative specifications, legislation is necessary in support of the FY 1996 budget in order to authorize the collection and expenditure of increased user fees from commercial applicants in the Regulatory Program. Legislation also is proposed to indefinitely authorize the continued maintenance of the National Inventory of Dams, a compilation of data on the physical characteristics and capacities of Federal and non-federal dams.

CONCLUSION

In conclusion, I would emphasize the stringent principles we have applied in determining our requirements for new appropriations for FY 1996 and the efforts we have underway to improve performance in the Civil Works program. I ask for your support as we move forward to streamline and restructure the Corps of Engineers. Thank you Mr. Chairman, Members of the Committee. This concludes my statement.

DEPARTMENT OF THE ARMY
CORPS OF ENGINEERS - CIVIL WORKS
FY96 BUDGET

FUNDING
(Dollars in Thousands)

ACCOUNT	SOURCE										
	FEDERAL FUND							NONFEDERAL FUNDS a/			TOTAL
	TRUST			SPECIAL	GENERAL	TRANSFER	TOTAL	RIVERS AND HARBORS CONTRIBUTED			
	INLAND WATERWYS	HARBOR MAINTNNC	OIL SPILL LIABILITY	RECREATN USE FEES				REQUIRED	ANCILLARY	TOTAL	
1. USACE APPROPRIATION											
GENERAL INVESTIGATIONS	-	-	-	-	155,625		155,625 b/	40,000	5,100	45,100	200 725
CONSTRUCTION, GENERAL	48,000	0	-	-	737,125		785,125 c/	214 700	20,800	235,500	1,020 625
OPERATION AND MAINTENANCE, GENERAL	0	500,000	-	30,000 d/	1,219,875		1,749 875	1,000	6,800	7,800	1,757,875
REGULATORY PROGRAM	-	-	-	-	112,000		112,000	0	0	0	112,000
F C, MISSISSIPPI RIVER & TRIB'S	-	-	-	-	319,250		319,250	12,700	100	12,800	332,050
GENERAL EXPENSES	-	-	-	-	164,725		164,725	0	0	0	164,725
FLOOD CONTROL & COASTAL EMERGENCIES	-	-	-	-	20 000		20,000	0	0	0	20,000
OIL SPILL RESEARCH	-	-	850 e/	-	0		850	0	0	0	850
PERMANENT APPROPRIATIONS	-	-	-	-	11,296		11,296	0	0	0	11,296
ALL	48,000	500,000	850	30,000	2,739,896		3,318,746	268,400	32,800	301,200	3,619 946
2 COASTAL WETLANDS RESTORATION TRUST						38,981 f/	38,981	10,576	0	10,576	47,557
3 ALL							3,355,727	278,976	32,800	311,776	3 667,503
DOMESTIC DISCRETIONARY							(3,307,450)	0	0	0	(3,307,450)
MANDATORY [DIRECTED]							(48,277)	(278,976)	(32,800)	(311,776)	(360 053)

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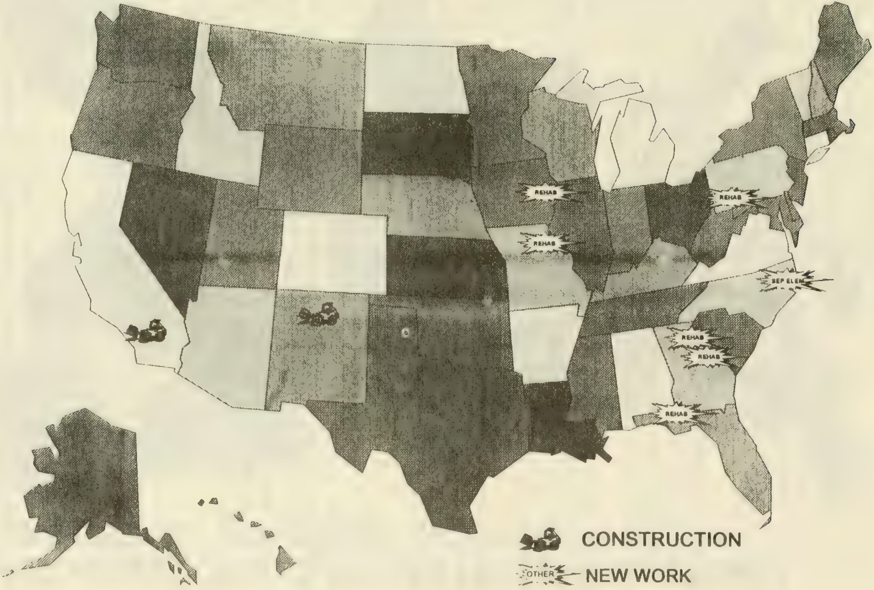
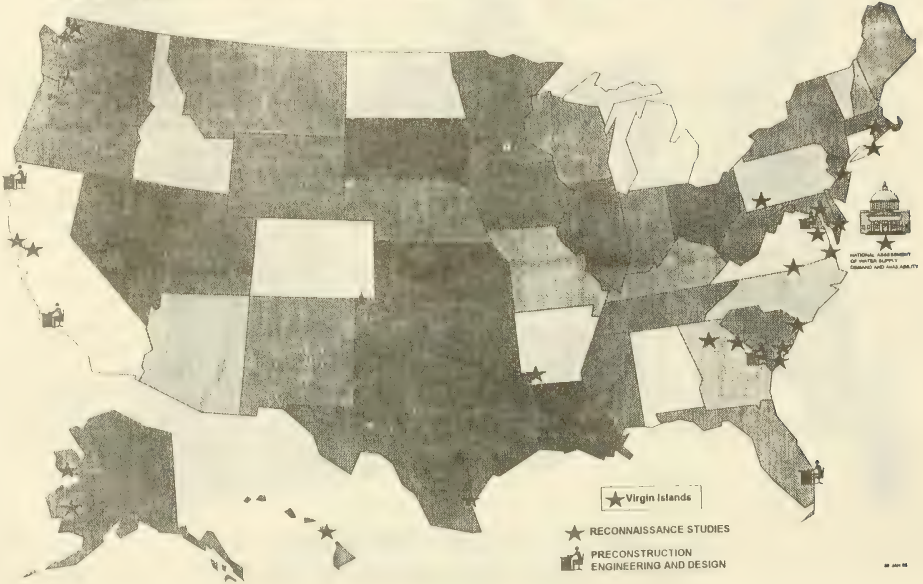
a/ Cash contributions required by law for programmed work, and provided for ancillary work beyond federal interest done at full nonfederal cost.
b/ Not including $4,555,600 in programmed carryover from FY95.
c/ Not including $352,125,000 in programmed carryover from FY95.
d/ Derived from the Special Recreation Use Fees receipts.
e/ Share of appropriation from Oil Spill Liability Trust Fund for an approved, multi-agency R & D program.
f/ Share of appropriation from U. S. Fish and Wildlife Service's Sport Fish Restoration Account (funded by Small Engine Fuel Tax receipts) for long-term conservation, protection, and restoration of coastal Louisiana.

CONSTRUCTION NEW STARTS AND OTHER NEW WORK FY 1996



RECONNAISSANCE STUDY AND PRECONSTRUCTION ENGINEERING AND DESIGN NEW STARTS FY 1996



CHIEF OF ENGINEERS

Mr. MYERS. Thank you.

General Williams, you may proceed now.

General WILLIAMS. Mr. Chairman, members of the committee, I appreciate the opportunity to testify before you today on the President's fiscal year 1996 budget request as it pertains to the Corps of Engineers Civil Works Program. My oral statement will briefly cover three topics.

Number one, I would like to talk a little bit more about our fiscal year 1996 budget; number two, I want to talk about program management; and number three, I want to talk about performance improvement challenges. So let me first start with our proposed budget, which as Dr. Zirschky has stated, is $3.67 billion.

This amount includes an appropriation request of $3.32 billion, plus there is a $37 million transfer of receipts from the Sport Fish Restoration Trust Fund into the Coastal Wetlands Restoration Trust Fund, and there is another $312 million that comes from non–Federal cost-sharing contributions.

In addition, the program also includes $357 million from unobligated carryover of prior year appropriations. The addition of all these funds that I mentioned brings our grand total for our 1996 program to $4.02 billion, excluding any offsetting receipts that we may receive.

The total program budget request of $3.67 billion is nearly the same as the amount received in fiscal year 1995.

The fiscal year 1996 program reflects the President's efforts, as Dr. Zirschky says, to Reinvent Government and to focus the Corps of Engineers on programs and projects of national significance.

The funds that we have requested are for 31 new reconnaissance studies, five new preconstruction, engineering and design efforts, two new construction projects, six major rehabilitation projects, and one separable element.

Of the $3.32 billion request, $579 million or roughly 17 percent would come from existing user fees and trust funds. With the associated non-Federal cost-sharing contributions, more than 25 percent of the new funding in our fiscal year 1996 program comes from sources other than general revenue.

PROGRAM MANAGEMENT

My second topic is program management. In support of the administration's National Performance Review and the efforts for Reinventing Government, the Corps has several initiatives to streamline its organization and its operations.

Recently, we eliminated review layers by centralizing our policy review at our headquarters, and we are decentralizing our technical review down to our districts. We also developed a flatter, more decentralized structure for our operations and readiness function for better response to our customers. By September of 1996, we will have reduced the number of headquarters internal management directives and publications by more than 50 percent.

In addition, by fiscal year 1999 we will have increased our supervisor-to-employee ratio from its current 1 to 6 to a target of 1 to 10. We will reduce the number of high grade personnel by 10 percent, reduce the Corps work force by 12 percent, and it should be noted that if the President's Reinventing Government initiatives are carried through, that will require further staff reductions of 9 percent by the year 2000.

We also have several task forces reviewing our national headquarters and our field division organizational structures. In addition, we are preparing plans to install one stop technical review at the districts and streamline various study processes that we use.

So collectively, these actions are intended to reduce our costs, simplify our administrative and technical processes, empower our employees, and make us more responsive to our customers.

In addition to our normal day-to-day missions, we also managed a series of natural disaster operations this past year. I would like to briefly outline two of them.

During and since the winter of 1994, the Corps has continued the rehabilitation of levees which were damaged from the Midwest floods in 1993. We expect to expend $230 million repairing 201 levees which were damaged by the event. We have already completed the repairs in 179 of those levees and the remainder of them are under construction at this time. During the flood we also did $20 million in emergency flood fighting.

Unfortunately, the Midwest floods were not the only areas to be hit by flooding. Shortly after the new year began, California was ravaged by a series of storms, resulting in 11 deaths and about $300 million in damages, and, again, the Corps was called into action.

Under our existing authority, we provided emergency contracting for the removal of debris at various bridges. We conducted emergency levee repairs, we provided sandbags and technical assistance to many throughout the area. In addition, FEMA assigned the Corps of Engineers missions of debris clearance, restoration of flood control channels, and preliminary damage assessments.

PERFORMANCE IMPROVEMENT

My third and final topic addresses performance improvement challenges. As Dr. Zirschky mentioned previously, we have had some difficulties and some problems in fully executing our Civil Works Program. These problems have created an unacceptably large amount of unprogrammed carryover dollars. We have undertaken some very specific actions to reduce and ultimately eliminate them. I would like to briefly discuss some of those actions.

One of our actions involves more accurate estimating. We are concerned about our performance in efficiently utilizing the appropriated and nonappropriated sponsor funds to deliver projects on schedule and within the cost estimates. This year we have increased our focus on producing more realistic schedules and expenditures and estimates.

Another of our actions is to increase our productivity, which is a challenge in an environment of downsizing. We are approaching this in several ways. First, we are delegating more decision-making responsibilities down to the district level. This, in turn, is being accompanied by downsizing our national headquarters and our field division staff levels.

Second, we are changing our business processes. Four examples of those changes are, one, centralizing our policy review at our headquarters, decentralizing our technical review down to our districts, delegating decision authorities on project cooperation agreements down to the districts, eliminating iterative reviews from our business processes in order to reduce some time, save some money and achieve a flatter organization, and, again, to empower the work force.

A third way to increase our productivity is to utilize the advancements in technology. There are several of them. To highlight one in particular, we call it SHOALS, which stands for Scanning Hydro Graphic Operational Airborne Lidar. It was developed in partnership with the Canadian Government, and it is decreasing the near shore hydro graphic surveying that we do.

We recently used SHOALS in nine of our coastal inlets with a cost savings of about $300,000 over the traditional methods. So we believe that SHOALS will produce over $3 million in annual savings.

We are also continuing to redefine our organizational structure because it offers the greatest potential for improving our production processes and our decision making. We have been working with the administration and with Congress over the past several years in defining acceptable ways to restructure our organization in order to improve the efficiency and effectiveness of the Corps.

CONCLUSION

Mr. Chairman, in conclusion, I strongly believe that our Civil Works Program continues to provide tremendous benefits to our Nation, both in peacetime and in war. However, as I have briefly outlined, we do have a number of challenges, but I am confident in our ability to respond to those.

We have had a long history of continually trying to seek improvements in the delivery of our services and our products and our projects to our customers and we intend to do that in the future. Mr. Chairman, members of the committee, that completes my oral statement.

[The prepared statement of General Williams follows:]

DEPARTMENT OF THE ARMY
CORPS OF ENGINEERS

COMPLETE STATEMENT

OF

LT. GENERAL ARTHUR E. WILLIAMS
CHIEF OF ENGINEERS
U. S. ARMY CORPS OF ENGINEERS

BEFORE

THE SUBCOMMITTEE ON ENERGY AND WATER DEVELOPMENT
COMMITTEE ON APPROPRIATIONS
UNITED STATES HOUSE OF REPRESENTATIVES

ON

THE CIVIL WORKS PROGRAM BUDGET
FISCAL YEAR 1996

FEBRUARY 21, 1995

COMPLETE STATEMENT

OF

LT. GENERAL ARTHUR E. WILLIAMS
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BEFORE

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UNITED STATES HOUSE OF REPRESENTATIVES

ON

THE CIVIL WORKS PROGRAM BUDGET
FISCAL YEAR 1996

MR. CHAIRMAN AND MEMBERS OF THE SUBCOMMITTEE:

Introduction

I appreciate the opportunity to testify before you, with the Acting Assistant Secretary of the Army for Civil Works, Dr. John H. Zirschky, on the President's Fiscal Year 1996 (FY96) Budget for Army's Civil Works Program. My statement covers these three topics:

- FY96 Civil Works Program Budget,
- Program Management, and
- Performance Improvement Challenge.

FY96 Civil Works Program Budget

Overview

The proposed FY96 Civil Works Program budget is $3.67 billion. This includes an appropriation request of $3.32 billion through the Energy and Water Development Appropriations Act; $37 million for Louisiana coastal restoration work, funded by transfer of receipts from the Sport Fish Restoration Trust Fund into the Coastal Wetlands Restoration Trust Fund; and $312 million in nonfederal financing from Rivers and Harbors Contributed Funds. In addition, the FY96 program includes the programming of $357 million from unobligated carryover of prior year appropriations in the General Investigations and Construction, General, accounts. The addition of these funds brings the total FY96 Civil Works Program budget to $4.02 billion, exclusive of offsetting receipts.

As shown in Table A, the total program request of $3.67 billion for FY96 is nearly the same as the amount for FY95. This is consistent with changes in the program proposed in the President's Reinventing Government initiative and the recently submitted budget amendments. The FY96 program reflects the President's efforts to reinvent government and focus the Corps' efforts on projects of national significance. Funds are requested for 30 new reconnaissance studies, 5 new preconstruction engineering and design efforts, 2 new construction projects, 6 major rehabilitation projects, and 1 separable element. The budget also provides follow-on funding for nearly all projects and studies that are underway, including a large number of studies and projects that received initial funding in FY95 appropriations. The FY96 program includes no new reconnaissance studies or new construction starts for local projects for flood protection or beach erosion protection. Projects and studies initiated in FY95 or earlier are proposed for funding to complete the current phase. For example, reconnaissance studies initiated with FY95 funds are budgeted for completion of that phase.

Of the $3.32 billion appropriation request, $579 million, or 17 percent, would come from existing user fees and trust funds, including fuel and *ad valorem* taxes. The budget includes a proposal to increase permit fees for commercial activities of the Regulatory Program to fund a portion of the program. It is estimated that the increased fees would generate $6 million in FY96 and $12 million annually in future years. Associated cost-sharing contributions increase to more than 25 percent the portion of new funding in the FY96 Civil Works Program from sources other than general revenue of the Federal Treasury.

General Investigations

Funding is included in the FY96 budget to continue planning on surveys initiated in prior years. 30 new survey studies are proposed to begin in FY96. The budget includes funding for the initiation of 5 preconstruction engineering and design (PED) projects for which the planning was conducted under the current 2-phase process, in partnership with a non-Federal cost sharing sponsor. The addition of these 5 will bring the total number of PED projects in the FY96 budget to 62.

The General Investigations (GI) account includes $3 million for the National Assessment of Water Supply Demand and Availability. This initiative is the subject of a FY95 reprogramming proposal submitted to you on 7 February 1995. The funding requested for FY96 would be applied to continue this 3-year $5.5 million initiative to collect data, refine and apply models, and undertake an extensive collaborative effort with public interest groups, water management institutions, and water users.

Construction, General

The budget request of $785.1 million for Construction, General (C,G), in combination with $352 million in programmed unobligated carryover, will continue 139 regular construction, 7 major rehabilitation, 8 dam safety assurance, 2 deficiency correction , and 2 reconstruction projects. This funding will be supplemented by an estimated $214.7 million in nonfederal cash contributions. Funding is included for 9 construction and major rehabilitation new starts. In addition, the budget includes $101.1 million for remaining items, including $41 million for the final year of funding for the Continuing Authorities Program.

Operation and Maintenance, General

The budget includes $1.75 billion for the Operation and Maintenance, General (O&M,G), account. This represents an increase of about 6.3 percent from the FY95 appropriation level. The funding is adequate to sustain services to the public at current levels. This increased funding is due to more projects on line, new environmental requirements, and the fact that older projects require more maintenance. Part of this increase is from recreation user fees, which will be used for operation, maintenance, and rehabilitation of these facilities. The public should see no negative impact in the operation of recreation areas or dredging of harbors and channels resulting from this funding level.

Flood Control, Mississippi River and Tributaries

The FY96 budget provides $319.3 million for the Mississippi River and Tributaries (FC,MR&T) Project. Before application of savings and slippage, this includes $5.3 million for investigations, $217.9 million for construction and $134.2 million for maintenance. This account reflects application of the same policies applied to the previously discussed accounts. There are no new starts.

Regulatory Program

The FY96 budget supports implementation of the Corps' part of the President's Wetlands Plan to improve the effectiveness of wetlands protection while reducing regulatory burdens on the public. The requested $112 million is an increase of $11 million over the FY95 appropriation. $6 million of this increase will be used to establish a new administrative appeals process, by which applicants can appeal permit denials and jurisdiction decisions without resorting to litigation.

Research and Development Program

The total Civil Works research and development (R&D) request for FY96 is $48.9 million. R&D is funded primarily through the GI and O&M,G, accounts, $35.6 million and $12.2 million, respectively. Smaller amounts of funding come from General Expenses ($0.3 million) and the Oil Spill Trust Fund ($0.8 million). The R&D activities are in the area of applied research and are structured to meet the highest priority needs of Corps districts and divisions.

Flood Control and Coastal Emergencies

The budget includes $20 million to fund the basic preparedness requirements of the Flood Control and Coastal Emergencies (FC&CE) program. This level of funding is sufficient to ensure our capability to respond to natural disasters, including hurricanes, floods, droughts, earthquakes and other events, as well as manmade disasters that could result in contamination of public water supplies. The basic level of funding budgeted for this program, as well as the workforce it supports, will be supplemented as necessary in the event of a major disaster requiring the Corps to respond.

I am gratified by the immediate and widespread response of the Corps civilian workforce when disaster strikes. From across the Nation, Corps employees volunteer to travel to disaster areas and use their skills to aid in response and recovery.

General Expenses

The General Expenses (GE) appropriation request is $164.7 million to fund executive direction and management activities at the Corps headquarters, 11 division offices, the Coastal Engineering Research Board, Humphreys Engineer Center Support Activity, Engineering Strategic Studies Center, and Water Resources Support Center.

The FY96 GE budget consists of two parts: Baselevel Operating Expenses and Civil Program Accounts. The baselevel operating expenses are comprised of 71% labor, 23% fixed costs, and 6% discretionary operating expenses. This portion of the budget request is $157.7 million, a 3.3% increase over FY95 at $152.5 million, for personnel compensation increases and normal inflation in rent, utilities, and telecommunications costs, as well as additional implementation costs, principally for training, associated with the new Corps of Engineers Financial Management System (CEFMS).

The remaining $7 million in the GE budget is required, principally, to fund civil works activities previously centralized at headquarters for economy and efficiency purposes and billed back across benefitting projects, but to be discontinued as "bill backs" by the end of FY95. Those activities determined to be necessary for continuation will either be direct-funded in the most appropriate account; financed through the Plant

Replacement and Improvement Program (PRIP) account, where appropriate; or charged on a fee-for-service basis where there is a clear benefit to projects and a user need. The Civil Program Accounts consist primarily of those activities previously centralized which, after a thorough review, are considered necessary for continuation as a headquarters activity, and thus are budgeted in the GE account.

The $6.8 million remaining available from the $7 million authorized in FY93 for restructuring will be used in the current and budget year to continue the Secretary of the Army's efforts to restructure the Corps.

Corps-wide Savings

The budget request incorporates the Federal Workforce Reduction Act staffing reductions and projected savings from procurement reform initiatives and implementation of FTS 2000.

Reimbursed Support for Others

A sizeable part of the Corps' program - that part for which funds are neither appropriated nor transferred to the Corps, directly - is not reflected in the budget. It comprises reimbursed support for other federal agencies (about 50) and governments through work in environmental, engineering, and construction management. Total reimbursement funding for such work in FY96 is projected to exceed $700 million. (Most of this - over $400 million - is for environmental work.) The largest share - nearly $240 million - is expected from EPA for cleanup of wastes at numerous sites under its Superfund Program. The next largest share - nearly $120 million - is expected from the Department of Energy (DOE) for facilities engineering and cleanup of hazardous and toxic wastes at nuclear weapons production sites in South Carolina, Texas, Washington, and other locations.

Staffing

Civil Program staffing for FY96 is 27,359 FTEs, reflecting a reduction of 480 FTEs from the FY95 total. This total includes 1,283 FTEs for reimbursed support for others.

Program Management

Introduction

Usually, this part of my testimony is devoted to highlights of recent civil program management; however this year it has been expanded to summarize our support for U. S. military operations. My goal is to give a better sense of the full scope of Corps service to the Nation, and to show synergy between our two programs in that service.

Support for Military Operations

We are proud of the Corps' post-Cold-War contributions to U. S. military contingency operations. Support to operational military forces is a key service to our Nation, and the Civil Works Program enhances Army's capabilities at no additional cost to the Department of Defense or Civil Works Program budgets or their respective civilian manpower ceilings. The program offers challenging work, training, and attractive careers to engineers and other professionals. It provides Army with significant experience in dozens of specialized fields that would not otherwise be possible. Such experience in contract administration, for example, enabled the Corps to develop, award, and manage Army's Logistics Civilian Augmentation Program contract (better known as LOGCAP). Designed to support U. S. forces in contingency operations worldwide, it has been used in Somalia, Rwanda, Saudi Arabia, and Haiti, for work ranging from base camp construction to logistical services. Much of the equipment and supplies for these recent U. S. military operations moved over waterways and through ports maintained under the Civil Works Program. These water transportation facilities are vital parts of our Nation's military power projection capabilities.

Civil Works Program

Congressionally-directed Changes

Introduction

Last spring, I appeared before you in response to the Surveys and Investigations (S&I) reports. At that time, I presented many management actions that had been completed as a direct result of the S&I reports, and indicated a number of further actions I would be taking. I'd like to review briefly the four areas that the reports covered: Information Systems Modernization Program (ISMP), Headquarters Centralized Accounts; the Revolving Fund (RF), including PRIP; and Project Management, and provide closeout on actions previously reported as ongoing or remaining to be accomplished.

Information Systems Modernization Program

In response to the S&I staff review of the Corps' ISMP, the Corps has taken a number of actions to improve its management of automated systems. These include submitting the entire ISMP for Major Automated Information Systems Review Council (MAISRC) review in accordance with Department of Army requirements; establishing a life-cycle management requirement for all Corps automated information systems to ensure that they are periodically reviewed for continued need and cost effectiveness; implementing changes in finance and accounting procedures to capture all automation costs; and appointing a single Corps-wide data manager.

Streamlining of CEFMS is ongoing. Benefits from innovations in software maintenance tools in the areas of system change controls and records retrieval are anticipated but will not be realized until fielding at more Corps sites. The full impact of business improvement opportunity savings and out-year cost avoidances in the CEFMS environment also will not accrue until completion of testing at the South Atlantic Division in March 1996. However, following are actions taken or soon to be taken.

- Streamlining the curriculum and reviewing the mix of Corps/contractor personnel teaching at the CEFMS Train-the-Trainer Institute. This resulted in a $224 thousand saving in FY94, with an estimated cost avoidance of $972 thousand over the next 3 years.
- The initial CEFMS Economic Analysis (EA) of 29 October 1992, was updated by the HQ U. S. Army Information Systems Command. Independent verification of this update is underway by the US Army Cost and Economic Analysis Center (CEAC). The updated CEFMS EA reflects the most current cost and productivity savings projections, and shows a benefit/cost ratio is 4.2.
- The Program Manager for the ISMP established criteria for limiting the procurement of electronic signature equipment (an estimated cost avoidance of $2.1 million) until completion (expected in late FY95) of an ongoing evaluation by the General Accounting Office and the National Institute for Science and Technology, and final approval of the electronic signature solution for government-wide use.
- The USACE Cost of Doing Business Task Force has been charged with expeditiously addressing business process improvements and savings as recommended by, and in unison with, our CEFMS test participants. We anticipate that many Corps business processes will be streamlined by the CEFMS solution, most notably high volume ones including: Labor (CETAL), Travel Orders, Travel Vouchers/Claims, Purchase Requests and Commitments (PRCs), and Requests for Training (DD1556).
- The submission of a Quarterly CEFMS Status Report as requested in House report 103-533, of 26 May 1994, to accompany the Energy and Water Development Appropriation Act, 1995, has begun. This report provides the Committee with a quarterly execution snapshot of the Project Management CEFMS Office progress.

Headquarters Centralized Accounts

I directed elimination of Headquarters Centralized Accounts, effective 1 October 1995, for activities accomplished centrally for selected programs and projects and "billed back" to benefitting divisions or districts. Each centralized activity funded in FY95 was examined to determine its continued need in FY96, and beyond. For those still needed, alternate direct- or "fee-for-service-" funding has been designated, as shown in a section of our justification materials called Centralized Accounts. This section includes a table showing final disposition of all headquarters activities funded in FY95. Any activity to be direct-funded is detailed in justification materials of the more appropriate account (either GE or GI account). Some parts of systems development, financed through the PRIP since FY94, will be financed this way until they are fielded.

Project Management

The findings of the S&I team regarding project management indicate that the project management business concepts the Corps is implementing were needed and continue to be essential for effective and efficient management of projects. Each division commander has been working diligently to assure that the concepts of the project management business processes are fully implemented within his districts. We have progressed beyond the implementation stage into the operational stage. We continue with many efforts to reduce the Civil Works Program processes for producing projects, streamlining reviews and delegating authorities. A review of project management data requirements imposed upon the field was conducted and 23% of the data elements were eliminated. A report defining a potential system for measuring the cost effectineness of the project management system was completed 1 Oct 94 by a field task force. This report will constitute a baseline document for use by the Directorate of Civil Works in meeting the Assistant Secretary's goal of having a performance management system for use in FY96. My senior staff will be reviewing the operation of the project management system to assure that its effectiveness is being realized. As I indicated last year, the implementation of a change of this magnitude has been difficult, but the results are proving to be very satisfying as our partners and customers are verifying.

Revolving Fund

In response to the S&I staff review of the Corps' Revolving Fund and its PRIP, the Corps has taken several actions to improve management of both. With regard to the RF, the Corps has confirmed with the Deputy Assistant Secretary of the Army for Financial Operations that its treatment of accrued annual leave accounts was correct; brought all subordinate activities in compliance with regulations pertaining to the charging of aircraft costs; and reemphasized to subordinate activities the importance of achieving year end balances as close to zero as possible. The Corps has provided the Committee with a RF financial statement for the end of FY94. With regard to the PRIP, the Corps has established new policies which limit purchases of nonconstruction equipment, ensure that plant depreciation and increment charges are applied consistently to all PRIP assets, and provide for termination of increment charges when the asset is fully depreciated and will not be replaced.

REGO

In furtherance of the Administration's National Performance Review and Reinventing Government (REGO) initiative to create a government that "works better and costs less," the Corps has several initiatives to streamline its organization and operations. Recently, we eliminated review layers by centralizing policy review at headquarters and are decentralizing technical review to district offices. In addition, we have developed a flatter, more decentralized structure for the Operations and Readiness function for better response to project customers. By September 1996, we will have reduced the number of headquarters internal management directives and publications by more than 50%. By FY99, we will have increased our supervisor-to-employee ratio from 1:6 (current) to 1:10 (target), reduced the number of high-grade personnel (GS 14 -15, SES) by 10%, and reduced the Corps workforce by approximately 12%. The President's reinventing government initiatives will require further staff reductions of an additional 9% by 2000. We also have several task forces working to review the headquarters organization; review division structures, prepare plans to install one-stop technical review at districts and streamline the feasibility study process. These actions, collectively, are intended to get back to basics - reducing costs, simplifying administrative and technical processes, empowering employees, and becoming more responsive to our customers.

Operations

Water Control

Flood Control

Though flooding occurred in many parts of the nation in FY94, the magnitude in surface area and damages was far less than in FY93 - the year of the Great Midwest Flood. Intense storms in the southeastern United States during July 1994 produced maximum-of-record flooding in the Ocmulgee and Flint River basins.

Other Purposes/Activities

Review and update the Master Water Control Manual for the Main Stem Missouri River Reservoirs is in the environmental impact statement (EIS) stage of the study process. The Draft EIS was released to the public in FY94 and more than 20 public meetings have been held at numerous locations within the Missouri River and Mississippi River basins. The recommended plan in the Draft EIS calls for some changes to the reservoir system's current water control plan. The focus of the changes is on the timing (seasonality) and magnitude of water releases from Gavins Point Dam into the lower

Missouri River for navigation, and fish and wildlife management. (We are reconsidering this plan and, ultimately, may not be recommending it.)

In the Pacific Northwest, Army continues to support the interagency efforts to protect and restore endangered Columbia River salmon runs. The National Marine Fisheries Service (NMFS) is the lead agency in this effort and will issue a Biological Opinion on 22 February. This opinion will include reasonable and prudent measures that the Corps and other federal Columbia River Power System operating agencies (Bonneville Power Administration and Bureau of Reclamation) should take in order to avoid jeopardizing the endangered salmon runs. A Record of Decision is scheduled to be signed by the Corps on 1 March.

Emergency Operations

Midwest Flood Recovery

The Corps continues to be involved in response and recovery activities related to disaster events since January 1994. During and since the winter of 1994, the Corps has continued rehabilitation of levees damaged from the Midwest Flood of 1993, under Public Law (PL) 84-99 (Flood Control and Coastal Emergencies). We expect to spend $230 million in repairing 201 levees damaged by the event. Repairs have been completed for 179 of these, and are underway for the balance. Wet conditions throughout the year and problems in getting rights-of-way have hindered progress. During the flood, we did $20 million in emergency flood fighting.

California Earthquake Recovery

The Northridge Earthquake (6.8 on the Richter scale) occurred 17 January 1994, in Southern California. The Corps actively supported FEMA earthquake relief and recovery efforts with over 800 personnel. The earthquake killed over 50 people and injured more than 9,000. Damage estimates, including both insured and uninsured losses, totalled over $20 billion. Missions ranged from providing electrical power to distributing water, to structural inspections of schools, public buildings, medical facilities, and constructing a temporary rail facility for mass transit. The value of the FEMA mission assignments exceeded $23 million. In addition, the Corps inspected its own projects and continues to coordinate with state and local governments. PL 84-99 activity for Northridge was approximately $1 million. The Corps also administered a $4.8 million mission assignment for the Small Business Administration that involved housing inspections.

Tropical Storm Alberto

During the summer of 1994, Tropical Storm Alberto created floods in the Southeastern

United States and caused extensive damage that resulted in response and recovery missions under both PL 84-99 and PL 93-288, The Robert T. Stafford Disaster Relief and Emergency Assistance Act. The Corps was again tasked (over $26 million in mission assignments) to provide ice, portable toilets, potable water, temporary housing, damage inspectors, and technical assistance. Under PL 84-99, the Corps participated in flood fight operations, provided technical advice, issued sandbags and pumps, and began the task of rehabilitating the damaged dams and levees.

California Floods

Shortly after the new year began, California was ravaged by a series of storms for 10 days, resulting in 11 deaths and about $300 million in damages, with more than half the state being declared a disaster area. Again the Corps was called into action. Under our existing authority we provided emergency contracting to provide for the removal of debris from threatened bridge structures, conducted emergency levee repairs, provided sandbags, and technical advice and assistance. In addition, under the authority of Public Law 93-288, the Stafford Act, the Corps was assigned $13.2 million in missions by FEMA for debris clearance from drainage basins ($9.5 million), restoration of a flood control channel ($2.0 million), Preliminary Damage Assessments ($130 thousand), and Damage Survey Reports ($1.5 million). The Corps is also providing personnel to support multiple Disaster Field Offices for the event ($60 thousand).

Performance Improvement Challenge

Introduction

As Dr. Zirschky described, we have had problems in fully executing the Civil Works Program. These problems are manifest as unprogrammed carryover amounts. These amounts have grown, for various reasons, over several years, until, now, they are unacceptably large. We have undertaken specific actions to reduce and, ultimately, eliminate them, as described next.

Problem Definition

As shown in Table B , the rates of expenditures, generally low for FY94, are projected to improve somewhat for FY95. Nevertheless, the problem remains significant for the Construction, General, Program, reflecting a projected $600 million unprogrammed carryover amount from FY95 to FY96. This reflects our planned use of $352 million in unobligated carryover to finance the FY96 program.

Improvement Goals

Accurately Estimating Capability

We are concerned about our performance in effectively and efficiently utilizing appropriated and nonfederal sponsor funds to deliver projects on schedule and within cost estimates. Our project managers have a propensity to be optimistic in the delivery of services at the project level. This year we have used the budget process to produce more realistic schedules and cost estimates. Experience at the national level reflects that project schedules and expenditures are often beset by unanticipated problems in local sponsor financing, real estate acquisition, environmental issues, design concerns, contract bid protests etc., which frustrate the optimism inherent in project schedules. I believe we have taken significant steps towards improving our statements of requirements on an individual project basis and also on an overall district workload basis. Our district and division commanders are including project and program performance in their project management and program managers performance standards and evaluations.

Conforming Schedules to Ability to Perform

We are equally concerned about improving our program execution to correspond with what we originally schedule with our project partners. We are encouraging our project managers to enter into more effective partnering relationships with projects sponsors so that both parties can realistically establish requirements and schedules. In addition, this budget request has been formulated in a manner that takes into account the capability of each district. By scheduling projects in accord with our capabilities and improving our emphasis on partnering relationships, we expect more realistic assessments of our partnership requirements and abilities will lead to more realistic planning, design and construction schedules. We have issued guidance and implemented plans in the past year which strengthen our partnering relationships and customer feedback arrangements.

Increasing Productivity

General

Increasing our productivity in an environment of downsizing is a challenge. Our efforts to do so are focused on improving the productivity of the work force that is retained. We are approaching this in two ways.

First, we are increasingly empowering our employees by delegating decision making responsibilities down to the district level which formerly were retained at the division and headquarters level. We are also directing that accountability flow with that powering down process. This, in turn, is being accompanied by downsizing headquarters staff levels. Downsizing of headquarters and division offices translates into increased productivity by significantly reducing decision time and the time allocated in project schedules to review processes.

Second, we are changing business processes. Three examples, two of which are discussed under REGO, are centralizing policy review at headquarters, decentralizing technical review to district offices, and delegating decision authority on project cooperation agreements to field offices. We are eliminating iterative reviews from our business processes, significantly simplifying them to reduce cost, achieve a flatter organization, and empower the work force most closely involved in deliverying products and services to our customers.

Third, we are increasing the investment in technology made available to our employees. The Scanning Hydrographic Operational Airborne Lidar (SHOALS), developed in partnership with the Canadian government, decreases the cost of nearshore hydrographic surveying. Recently, surveys were conducted at 9 coastal inlets with a cost savings of $300 thousand over traditional methods. We believe SHOALS will produce over $3 million in annual savings. Another example is the Hydrologic Evaluation of Landfill Performance (HELP) model, which is a microcomputer-based tool for evaluating/designing landfills. Sixteen Corps districts use HELP for review/evaluation of designs for Superfund projects and for waste disposal systems at military installations. HELP saves about $2 thousand per review, over $5 thousand per design, and probably over $100 thousand in construction per facility. More than 75 reviews, 15 designs, and 15 construction projects are performed per year.

Additionally, all districts use Computer-Aided Drafting and Design (CADD) systems which allow our engineers to see their designs in real-time. The districts use Geographic Information Systems (GIS) or other computer mapping systems to produce maps faster and with greater accuracy than with old labor intensive methods. The Corps and Coast Guard have collaborated to install four Global Positioning System (GPS) radiobeacons at sites along the Mississippi River to provide real-time positioning for government and commercial users (marine, land, and air). Coverage includes all states along the Mississippi River between Iowa and Louisiana. These new tools find application across the board - in our water resource, military construction, and environmental restoration mission areas. For example, for some river engineering and construction missions (e. g., hydrographic surveying and dredging operations) the Corps and many of its contractors have increased productivity up to 50% through use of GPS. Aerial crop dusters in Mississippi and Arkansas now depend on this system to control spraying lanes.

Improving Performance Measurement

We have increased our focus and emphasis on performance measurement in several dimensions. District, division, and headquarters management reviews focus on performance measures unique to their level in evaluating schedule performance, effective use of funds, and accountability for the products for which they are responsible. We are implementing schedule and cost performance measures designed to evaluate, on a bi-monthly basis, how we are performing in meeting project schedules and staying within cost estimates. Complete and effective use of these measures will be enhanced once our project management information systems (PROMIS) is deployed and operational.

In the O&M arena, a performance measurement system is being installed that will facilitate assessment by the organization at all levels of how various measures contribute to improvement of the program and how productivity can be increased. These measures, to be in place by FY96, will focus on "results" and "outcomes." This system will link national program performance indicators with indicators at the project where the actual work is performed. In this way, every employee will know how his or her job contributes to corporate goals and objectives. We are calling this process "The O&M Plan of Improvement." It supports the objectives of the National Performance Review and is a pilot project under the auspices of the Government Performance and Results Act (GRPA).

Improving Production Standards

This is a dimension of performance that we feel pretty good about. Our customer feedback surveys reflect that we are delivering quality products. Customer feedback has resulted in our directing our priority efforts at improving our performance in delivering projects on schedule and within cost estimates. We want to maintain quality while reducing the time and cost overruns being experienced. Accordingly, we are emphasizing improvements in our production processes to achieve cost reductions and better schedule performance in producing the quality products we take pride in.

Improving Production Processes

We are investing a considerable effort in this area because of our customer feedback and the initiatives to downsize government. It presents the challenge of maintaining or increasing production with declining human resources. We continue to invest in research and development and technology to improve the production processes and the tools available to our workforce. For example, we are testing innovative technologies for constructing lock and dam projects to reduce the cost and time for bringing such projects on line. We have been investing in modernized computer technologies which facilitate planning, design and managing the large complex projects which we build.

Conforming Organization Structure

We view redefining our organizational structure as offering the greatest potential for improving our production processes. We are increasing our efforts at redefining our organizational processes for decision making. We have been working with the Administration and the Congress over the past several years in defining acceptable ways to restructure our organization to improve the efficiency of the Corps in delivering projects. An example of our efforts in this regard is in the O&M arena, where we have standardized the organizational structure so that operations project managers, in charge of one or more projects, report directly to the Chiefs of Operations, responsible for the programs. This decentralizes decision making at the project level, where the "rubber meets the road."

Conclusion

Our Civil Works Program continues to benefit the nation as evidenced by our investment analyses and customer feedback surveys. We, however, have a number of performance improvement challenges facing us; and I am confident in our ability to respond. We have a long history of continually seeking improvement in the delivery of our programs. Our most recent investments in adjusting the Corps' business culture to achieve improved performance and greater customer satisfaction has been the institution of project management. The need was apparent when we entered the era of cost sharing on the projects we build. The fruits of that cultural adjustment are beginning to emerge in terms of greatly improved partnership relationships with state and local governments.

We are now devoting our energies to empower our workforce at the lowest possible level and improve the efficiencies of our decision processes. This will improve our performance in delivering projects authorized by Congress and simultaneously enable us to be responsive to current initiatives to downsize government.

Thank you Mr. Chairman and Members of the Committee. This concludes my statement.

TABLE A
DEPARTMENT OF THE ARMY
CORPS OF ENGINEERS - CIVIL WORKS
PROGRAM SUMMARY, FISCAL YEARS 1994, 1995 AND 1996
(DOLLARS IN THOUSANDS)

SOURCE OF FUNDS	FY 1994 (Approp.)	FY 1995 (Approp.)	FY 1996 Request
FEDERAL APPROPRIATIONS			
GENERAL INVESTIGATIONS	207,540	181,199	155,625
CONSTRUCTION, GENERAL			
General Funds	1,279,282	912,631	737,125
Inland Waterways Trust Funds	121,593	71,037	48,000
TOTAL	1,400,875	983,668 b/	785,125
OPERATION AND MAINTENANCE, GENERAL			
General Funds	1,170,990	1,147,535	1,219,875
Special Recreation Use Fees	18,000	37,000	30,000
Harbor Maintenance Trust Funds	500,000	462,000	500,000
TOTAL	1,688,990	1,646,535	1,749,875
REGULATORY PROGRAM			
General Funds	92,000	101,000	106,000
Proposed User Fees	0	0	6,000
TOTAL	92,000	101,000	112,000
F.C. MISSISSIPPI RIVER & TRIB'S	348,875	328,138	319,250
GENERAL EXPENSES	148,500	152,500	164,725
FLOOD CONTROL & COASTAL EMERGENCIES	150,000	14,979	20,000
OIL SPILL RESEARCH	350 a/	900 a/	850 a/
PERMANENT APPROPRIATIONS	12,000	11,979	11,296
TOTAL, APPROPRIATIONS	4,049,130	3,420,898 b/	3,318,746
OTHER AVAILABLE FUNDS (NON-APPROPRIATED)			
COASTAL WETLANDS RESTORATION TRUST	34,939	35,000	36,981
RIVERS AND HARBORS CONTRIBUTED FUNDS	206,000	223,995	311,776
TOTAL PROGRAM	4,290,069	3,679,893 b/	3,667,503

a/ Corps portion of multi-agency R & D program funded by appropriations from Oil Spill Liability Trust Fund

b/ Excludes $250,000,000 in unobligated carryover from prior years that is being programmed for use in FY 95, of which $50,250,000 is derived from the Inland Waterways Trust Fund

Table B

DEPARTMENT OF THE ARMY
CORPS OF ENGINEERS
CIVIL WORKS PROGRAM

PROGRAM EXECUTION
(millions of dollars)

Account	94 Actual			95 Scheduled		
	Available	Expended		Available	Expended	
		Amount	Rate 1/		Amount	Rate 1/
General Investigations	260	170	0.65	272	222	0.82
Construction, General 2/	1,857	1,047	0.56	1,793	1,172	0.65
Operation and Maintenance, General	1,834	1,690	0.92	1,752	1,706	0.97
Flood Control, Mississippi River and Tributaries	438	375	0.86	391	391	1.00

1/ Ratio of total expenditure to total available for expenditure.
2/ Including Inland Waterway Trust Fund.

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02:46 PM, 02/15/95

NEW PROGRAM POLICIES

Mr. MYERS. Thank you. One thing that concerns me, and I am sure it concerns every member of this subcommittee and probably is going to concern a lot of people when they learn more about it, as part of the President's, I guess as part of the President's reinventing the new government or whatever you want to call it, is the term national significance, which is a rather broad brush that includes a whole new criteria for deciding what work you will be doing in the Corps.

How was that decision made? Were there any hearings held when that decision was made? For example, to only fund flood control projects if more than 50 percent of the water flows from outside the State and reversing the 75–25 payment schedule, was that decision made at a higher level, like OMB or someplace? Were there any hearings held? Did you people have any input into that decision?

Mr. ZIRSCHKY. There were no hearings held. The decisions were reached as part of a government-wide effort that took place in late 1994. For example, we saw the press conferences with DOT, HUD, some of the other agencies. We did participate in the process.

Mr. MYERS. Participating at what level? Saying, yes, we will go along with it, is that the participation or what do you mean by participating with it?

Mr. ZIRSCHKY. We were asked to provide input on amount of dollars savings that would go along with various proposals.

FLOODPLAIN MANAGEMENT

Mr. MYERS. Well, you made the statement, I believe, that this new plan would help floodplain management. It kind of escapes me that that is going to improve floodplain management when you are turning it over to local governments to regulate these things. The water falls all over the country, but you are not going to be concerned about it until it gets into an area where you have some responsibility, and that is going to be the larger tributaries, like the Ohio River and the Missouri River and others. You aren't going to have a doggone thing to say about it. The flood is going to hit you. You are going to say, well, I can't do anything about it; it is somebody else's jurisdiction. Is that going to help floodplain management, that kind of reasoning?

Mr. ZIRSCHKY. The feeling is that if local governments take more responsibility for flood protection, that they will take a more active role in preventing the unnecessary development of the floodplains, putting businesses in the floodplains that don't necessarily need to be by the river. For example, you would want to have a port by the river. There isn't much you can do about flooding there, but do you need other businesses in the river?

Right now with the large Federal contribution, the local governments may not take all the measures at their disposal to prevent future flood damages by controlling the development of the floodplains.

Mr. MYERS. Well, two things. Local government, of course, is suffering the same problem we are. They don't have the funds to do these kind of things, and secondly, most local government wants to get the water off as quick as they can into a tributary or into a stream.

Look at all the shopping centers we are building, all the housing areas, developments that we have built, even agriculture. The key is to get that water away as quick as you can and they are going to continue to do that. It is going to present more problems to the lower Mississippi. And the floods in the Midwest, that we talked about in 1993, is that going to aggravate it, if you are going to turn it over to local government? They aren't going to have the same concern as we have looking at it with a national view.

Mr. ZIRSCHKY. We hope with our increased funding for our Floodplain Management Program we can give them some of the technical expertise to help them deal with these problems.

Mr. MYERS. What kind of expertise?

Mr. ZIRSCHKY. Our hydrologists, for example, could assist them in determining where the floodplain is, what measures would be most effective in preventing floods, those kind of activities.

PRIORITY OF ENVIRONMENT

Mr. MYERS. Well, in your prepared statement you talked about the most critical missions for the Federal Government, yet it seems like the environment is a higher priority than flood control. How did you decide to make environment a higher priority than controlling floods that take people's lives, take their property, cause severe loss to the economy, the fact that there is no production to pay income taxes? How can environment be a higher priority than flood control?

Mr. ZIRSCHKY. When the administration started its review, they looked first at what is a Federal responsibility and what should be a local responsibility, and most of our investment in environmental matters is mitigating damages caused by the Federal Government. Therefore, the Federal Government was felt to be responsible, such as the Columbia River mitigation, the Everglades work, all activities where the environmental damages were caused originally by the actions of the Federal Government. Whereas local flood protection is protecting the local people and that was felt to be something that local governments could do better.

Mr. MYERS. Floods can cause damage to the environment also. I know. I lived on the Wabash all my life and I have seen all kinds of animals floating down the stream. The spring floods destroy the habitat. Isn't that part of the environment also?

Mr. ZIRSCHKY. Yes.

Mr. MYERS. But this administration doesn't look at it that way, I guess. Maybe they have never been out on a river to see what floods really do. Maybe we ought to put some of them out there. OMB, I guess, is making this decision, the way it sounds. Maybe we ought to put them out there with a shovel filling a sandbag some time. They would have a little different perspective. Hearings would have helped a whole lot, it seems to me, but that wasn't your fault. But it seems like the administration might have been wise to have had hearings and talked to the people in the Midwest who have suffered those floods.

LEGISLATIVE SPECIFICATIONS

Mr. ZIRSCHKY. We hope to send what we call some legislative specifications, sort of outlining which authorities are affected and hope that our committees will use those as a basis for hearings so that we can discuss these in more detail.

Mr. MYERS. You used "if" and "hope" and "maybe". Those are all nice things to talk about, but in reality those things just don't happen, we have found through the years. Ifs and maybes and hope are nice to talk about, but local communities don't have the money. They are already suffering from floods. I realize what you hope, but I think we have to deal with reality here.

RECOGNITION OF MR. BEVILL

I have used my five minutes. Mr. Chairman, Chairman Bevill, I still call him Mr. Chairman. Once a Chairman always a Chairman here.

Mr. Bevill.

NATIONAL SIGNIFICANCE

Mr. BEVILL. Thank you, Mr. Chairman. Mr. Secretary, this national significance, what are your plans for getting the interpretation on that? Are you going to issue rules and regulations to determine that or are you going to rely on authorization legislation to do it or just how do you plan to go about that?

Mr. ZIRSCHKY. We will need legislative change to change the cost sharing. However, the administration does not intend to budget, given the budget realities we face in reducing our budget, does not intend to budget for new flood control projects unless they meet the three criteria.

Mr. BEVILL. What, in your judgment, would be a project of national significance?

Mr. ZIRSCHKY. One that meets the criteria where the benefit cost ratio is greater than 2 to 1, more than half the flood waters originate outside the State, and where the local sponsors would pay 75 percent. Those projects would be considered nationally significant.

Mr. BEVILL. Let me see if I followed you there. If there is more than one State involved, did I follow you on that?

Mr. ZIRSCHKY. If more than half the flood waters come from outside the State, yes.

Mr. BEVILL. Okay. If it is just a third from outside the State, that wouldn't be of national significance; is that your thinking?

Mr. ZIRSCHKY. Yes, Mr. Bevill.

Mr. BEVILL. This is going to present some interesting situations; isn't it? It is going to be interesting to watch.

Mr. FAZIO. It is designed to fail.

Mr. BEVILL. You've got a pessimist back here. In this new policy is your main goal just to reduce spending or is this to stem from a belief that many of the past activities of the Corps have not been beneficial to the Nation?

Mr. ZIRSCHKY. It is twofold. One is to focus the Federal Government on activities that are believed to be Federal responsibilities and the second is for deficit reduction purposes.

PROGRAMMED UNOBLIGATED CARRYOVER

Mr. BEVILL. I would note that in this chart here, the Corps of Engineers summary on the amount of money requested for construction, that in the 1996 program there is—I am looking at your testimony there—it is a total $1,137,579,000. I noticed that that includes $352 million in programmed unobligated carryover to be expended in 1996.

How did that come about? Somebody finding that much money? Three hundred fifty-two million dollars that is unobligated is so unusual that I am curious.

Mr. ZIRSCHKY. Our performance significantly decreased in fiscal year 1993, which led to us not building the things we said we were going to build when we said we would build them.

Our fiscal year 1994 budget was not as, how do I put this, was overly optimistic as well, which contributed to the project. It seems like we looked over past history. About every five years, we seem to run into a cycle where we have a large amount of carryover, and we work that off for a few years, then are back with large carryover again, but the problems stem from basically we didn't build what we said we would build. We didn't expend the money that you appropriated for us.

APPLICATION OF NEW POLICIES

Mr. BEVILL. How will these new policies be applied to the ongoing projects?

Mr. ZIRSCHKY. We will complete whatever phase an ongoing project is in. If we are in a feasibility study on a flood control project, we would complete it under the prior policies. However, we would not move to the next phase of the project unless it met the national significance criteria.

Mr. BEVILL. So that shouldn't create any problems, then, for the local sponsors?

Mr. ZIRSCHKY. I don't know if I can say that.

Mr. MYERS. It sure will.

Mr. BEVILL. I shouldn't have asked that question that way. But, yes, there are going to be lots of problems, aren't there?

So actually now these new policies, are they going to—so actually what you are saying is you are going to phase them in over a period of several years?

Mr. ZIRSCHKY. The effect will be a phase-in over several years because projects are in various stages, but essentially the new policies, the administration considers those in effect now, and we decided not to fund or propose for funding some new starts in fiscal year 1996.

IMPACT ON STAFF

Mr. BEVILL. What impact will this new policy have on your staffing levels between now and the year 2000?

Mr. ZIRSCHKY. The only number that we know for certain now is fiscal year 1996 where we will have a decrease of another 196 FTEs. The impacts in the outyears could be much more significant.

BENEFITS OF PROJECTS

Mr. BEVILL. Your testimony about the value of the benefit cost ratio is very interesting there, and those are figures that I think can be very useful to us in the future. For example, I don't think you gave any value on flood control, but we have always received testimony from the Corps here that flood control, for example, for every dollar that is invested that we have a benefit cost ratio, a benefit of $6, and you have extended that and gone into several others here which I think is very good. I am curious to know, though, what do you consider the interest rate? What interest rate do you use in computing these benefit cost ratios now?

Mr. ZIRSCHKY. Six and seven-eighths at present.

[CLERK'S NOTE.—Dr. Zirschky provided additional information for the record as follows:]

The Discount Rate established in accordance with Section 80 of the Water Resources Development Act of 1974 for FY 96 is anticipated to be 8%. However, the budget contains a mix of projects whose discount rates which were fixed at the time construction was first funded, ranging from 3¼% to 8⅞%.

Mr. BEVILL. Thank you, Mr. Chairman.

Mr. MYERS. Mr. Rogers.

FLOOD CONTROL POLICY

Mr. ROGERS. Thank you, Mr. Chairman. Welcome, gentlemen.

Dr. Zirschky, as I have calculated it, about the only place that would qualify under the administration's new flood control projects policy is Washington, D.C. because any water reaching here, of course, originates somewhere else.

I am absolutely flabbergasted that an administration that says that it is concerned about helping local communities help themselves could come up with a proposal that denies the aid of the only government capable of helping those local communities in a catastrophe like the floods are, particularly poor communities, that you would come up with a scheme such as this.

This is an absolute abdication of the responsibility of the Federal Government in disasters. We are not talking just about water overflowing and being a nominal problem. These are catastrophes. Is the administration also proposing that in case of a tornado or some other type of disaster that the Federal Government step back and say, well, we are not going to help you unless that wind came from out of State?

Mr. ZIRSCHKY. We are still proposing to serve the P.L. 84–99 program to help fight floods when they occur. As for other disaster responses, I would defer to FEMA for what the administration's policies are there.

Mr. ROGERS. Well, we are talking about preventing those disasters here. And if you are abdicating the responsibility of preventing the disaster, but you are saying we will let the Federal Government come in and clean up the mess afterwards, including sweeping the bodies off the river banks, I find that to be an absolutely idiotic proposal, and I am sure you didn't make it.

I am sure the Corps is crying in its private moments, the individuals who have been responsible for running this great agency over the years. I am sure that you are heart broken that you are having to come here and testify to such an idiotic idea, and it is stupid on the part of the OMB to make you do this because it makes us write your budget for you.

You are prevented from coming here with a responsible budget, and you are making this committee make your decisions for you. We normally review your decisions, but now you are asking us to write it from scratch, and that is an irresponsible position of the administration.

They know we are not going to adopt these stupid ideas, and they should never have sent you up here with that kind of testimony. I am sorry for you. Because I know you and the folks around you are responsible people. We had the privilege last fall of helicoptering all day long through flood projects in the mountains of Kentucky, and I know where your heart is, and I am deeply saddened that the administration is stepping back from helping people in their hour of highest need.

BUDGET REQUEST TO OMB

I want to know how much you—what your budget request to the OMB was. Did they make any changes in your request to them?

Mr. ZIRSCHKY. Yes, sir.

Mr. ROGERS. Tell us about it.

Mr. ZIRSCHKY. Is there a specific——

Mr. ROGERS. Well, start with some total figures and work your way on down the list.

Mr. ZIRSCHKY. In new appropriations, we had requested $3.6 billion as opposed to the $3.3 billion.

Mr. ROGERS. What about the flood protection projects whose rules are changed here? Was that your request or their request?

Mr. ZIRSCHKY. We had submitted floodplain or flood protection projects in our original submission.

Mr. ROGERS. How many and——

Mr. ZIRSCHKY. I would have to get you the exact numbers.

Mr. ROGERS. Will you file that for the record?

Mr. ZIRSCHKY. Yes.

[The information follows:]

NUMBER OF STUDIES AND PROJECTS INCLUDED IN THE OMB REQUEST

Our fiscal year 1996 budget request to OMB included 352 General Investigations studies and projects and 198 Construction, General projects and activities. Of those submitted 71 General Investigations studies and projects were deleted because of the new policy. Also, it is possible that some of the studies which are budgeted may fail one or more of the tests for federal significance once we have acquired sufficient information, during the reconnaissance phase of study. For Construction, General, 14 projects required additional authorization and were deleted when Congress adjourned without passing WRDA 94. Six projects and elements of 3 projects were not in accordance with the Administrations traditional budget priorities, and 9 projects and the Aquatic Plant Control Program were deleted because of the new policy.

REQUEST TO OMB

Mr. ROGERS. In other words, you had requested monies for the continuation of the flood control projects in which you have already invested hundreds of millions of dollars and which are in some degree of completion, right?

Mr. ZIRSCHKY. Yes, we are proposing to complete those that are already under construction, however.

Mr. ROGERS. Well, will you submit for the record, then, what you requested of OMB in every category in the bill?

Mr. ZIRSCHKY. Yes, sir.

[The information follows:]

FY96 Budget
Funding Request 1/
(thousands of dollars)

Appropriation Account	Amount Requested	
	Of OMB	Of Congress
General Investigations	164,000	155,625
Construction, General	991,600	785,125
General Revenue	(917,600)	(737,125)
Inland Waterway Trust Fund	(74,000)	(48,000)
Operation and Maintenance, General	1,840,000	1,749,875
General Revenue	(1,300,000)	(1,219,875)
Harbor Maintenance Trust Fund	(500,000)	(500,000)
Special Recreation User Fees	(40,000)	(30,000)
Flood Control, Mississippi River and Tributaries	350,000	319,250
Regulatory Program	105,000	112,000
Flood Control and Coastal Emergencies	20,000	20,000
Revolving Fund	0	0
Permanent Appropriations	12,000	11,296
General Expenses	166,000	164,725
Rivers and Harbors Contributions	311,776	311,776
Coastal Wetlands Restoration	36,729	36,981
Oil Spill Research	850	850
Total	3,997,955	3,667,503

1/ Excluding $4,555,600 and $352,125,000 in programmed carryover for the General Investigations and Construction, General, accounts, respectively, which, added to the total requested of Congress, $3,667,503,000, yields total funding of $4,024,183,600.

BUDGET REQUEST

Mr. ROGERS. I take it they made substantial changes in your request.

Mr. ZIRSCHKY. Most of the budget request is actually the same. It is in floodplain and flood protection projects. Aquatic plant control are the primary changes.

Mr. ROGERS. Well, it is interesting that the OMB's idea is that a traditional Corps mission is now considered local in nature, others are not. For example, as the Chairman indicated, they apparently consider an environmental project, regardless of where it originated, to be nationally significant and therefore in the mission of the Corps, but not the destruction of human beings.

Maybe the destruction of a tree or a plant or an animal but not a human being is nationally significant. Can I read that into these words?

Mr. ZIRSCHKY. The feeling was the environmental projects are primarily to mitigate actions the Federal Government caused and therefore Federal responsibility.

WATER SUPPLY

Mr. ROGERS. On another point, has the Corps now changed its mission contrary to the congressional authorization? Are you now legally authorized to do water supply work?

Mr. ZIRSCHKY. We are not proposing to do water supply, but more of a water resources planning effort. We are not proposing to provide water for communities, but that a Federal role would be to help sort of predict the future as to where are we going to have shortfalls.

We are very good at predicting one end of the hygrograph when there is going to be a lot of water. We can use those same tools to help predict when there is not going to be very much water and then State and local governments can use that information to plan for their growth and how they are going to meet their water resources needs.

Mr. ROGERS. Does half of that nonexistent water not have to come from another State in the Water Supply Study Program?

Mr. ZIRSCHKY. Much of the water used for water supply does come from other States. We are at the heart of many controversies because our reservoirs may be in one State and other States downstream are dependent on that water.

Mr. ROGERS. What I am asking you is, are you going to supply the same half out of State water in the water supply studies you are going to be doing as you are in flood control?

Mr. ZIRSCHKY. No. No. This basically is just sort of a prediction of where we think water demand is going in the country versus regional water supply. The last time this study was done was in the late 1970s.

Mr. ROGERS. So you are going to find out where we—how to find water?

Mr. ZIRSCHKY. Or where there might be potential drought problems in the future.

Mr. ROGERS. So we are going to exchange your bulldozer for a divining rod; is that what we are doing with the Corps?

Mr. MYERS. Peach branch.

Mr. ROGERS. Peach branch.

Mr. ZIRSCHKY. No, sir, we are just basically proposing to do a small study that local governments and State governments can use to look to the future.

Mr. ROGERS. You are going to help local governments and local people. How nice of you.

Mr. FAZIO. Help them determine what they can't afford.

Mr. ROGERS. My time is rapidly diminishing here. I will reserve questions for the next round.

RECOGNITION OF MR. FAZIO

Mr. MYERS. Mr. Fazio.

Mr. FAZIO. Thank you, Mr. Chairman. I want to pick up right where Mr. Rogers left off.

First of all, let me say welcome to all my friends, and I mean that. All of you have been good servants of the public and certainly have worked well with this committee and I want to thank you particularly, plus an awful lot of people in the region for the work you did on the flooding in the Sacramento Valley and California in the most recent period where we had these incredibly heavy downfalls.

We are still waiting to see what happens to that snow pack as we get closer to the warm spring rains, and I hope everybody will stay alert because I think we have not necessarily passed the worst of what we face. But I am just absolutely frosted at a couple of things.

One, coming here for the third year in a row without someone running the Corps of Engineers. Dr. Zirschky, I have no animus toward you. I think you have done a fine job. I am glad that we, at least, had someone acting in that role for a while, and I know you have taken a key job, tried to perform it well. But to have this agency for the third time since I have been here on this committee under this administration not have someone in charge is a travesty, and it indicates just where you rank in their priorities.

I am outraged that we can't find a way to break the impasse between the environmentalists, I gather, and everybody else. We can't find anyone who is theoretically competent to manage the politics, let alone the administration of the Corps of Engineers. I know there are a lot of people whose names have floated up to the top, only to be discarded, and I am going to let the administration know directly just how angry I am that we have done this another year.

My remarks from last year were predicated on the fact that I assumed the appointment was to be forthcoming shortly. I think I will just put them in the record to point out how overly optimistic I was. And then this budget that floats up here in my view is a joke.

[The information follows:]

POLICY ISSUES

Mr. FAZIO. Thank you, Mr. Chairman.

I once again want to welcome all of you to the annual process. I do want to say parenthetically, and I do not mean to imply any criticism of anybody individually, but I am very frustrated by the fact that one year-plus after this Administration takes office, we still do not have a politically appointed policymaker sitting at this table. I understand it is imminent, but we in effect have to go through two budget cycles without having anybody who we can talk to on policy issues.

I am not here as a Democrat at the moment, I am here as an appropriator who considers this a valuable part of the legislative process, and I am very frustrated and chagrined by the fact that we have not been able to make one person the focus of this Administration's efforts for this entire calendar year. You would have thought we could have gotten somebody nominated and approved in time to give the House Appropriations Subcommittee on Energy and Water Development an opportunity to ask questions that can not be answered at the moment by people who do not come with the imprimatur of the Clinton administration.

Mr. FAZIO. Now, I realize there are tremendous pressures on the administration to cut spending. I admit there are even greater pressures perhaps on this committee and in the Congress. I mean, we are going to be paying for three different kinds of supplementals here, including disaster relief, much of which goes to California by finding money somehow within the 1995 budget year, so I am not putting all the burden on the administration in this regard. But it seems to me you have walked away from your historic role, and I just find it something that I can't abide, I can't agree to.

SANTA ANA PROJECT

Does anybody here know offhand what the Santa Ana project will cost in total? I have seen lips moving in the back of the room, some people in olive drab.

General GENEGA. I think it is about $1.3 billion.

Mr. FAZIO. Based on looking at the criteria you have set, that would not have been ever performed under this budget, is that right, because it is a California project. It doesn't get any of its flood waters from some other State.

Mr. ZIRSCHKY. That is correct.

Mr. FAZIO. That probably is the most expensive flood project the Corps has built, is that right, in the modern era certainly? Don, what do you think? Maybe in real dollars some others have cost more.

Mr. CLUFF. I think the Passaic, New Jersey, might be more. Red River, if you count it as one project instead of five locks and dams.

General GENEGA. It is certainly up there, sir.

Mr. FAZIO. And yet you wouldn't have done it under your criteria. It wouldn't have been anything we would have done other than give Orange County and the State of California some consulting material that we could apparently use when we figure out how to come up with the money.

I don't know whether the Passaic project could be rationalized or not. I will let Mr. Frelinghuysen, carrying on in the Gallo tradition, ask those questions, but Mr. Chapman, I am sure, will have questions for the record. Members from Florida will have questions for the record.

NEW CRITERIA FOR FLOOD CONTROL

Some of the most important flood projects in the country don't obtain their waters from outside the State boundaries, so by using the criteria you have here, you basically walk away from most of the major flood threats in the country that remain to be either mitigated or resolved. Is that a fair statement?

I know you don't want to use the term, "walk away," but the bottom line is that is what we are doing.

My area of Sacramento is a district which has a river run through it; not just one, a number. We have been working diligently in our region to find solutions to our flood problems. We are struggling to come up with something in a bipartisan fashion in this Congress that we would bring to the authorizing committee. But my reading of your criteria is we don't have a chance of getting even the 25 percent in lieu of the 75 percent we have been hoping to get. Am I wrong? I hope I am. This is a project that is totally within the boundaries of the State of California.

Mr. ZIRSCHKY. For new projects starting construction, that is correct. It would not meet the criteria.

Mr. FAZIO. So you would lead us up to the altar, tell us how much it was going to cost us, and walk away, even though we have been struggling with this problem for decades, and directly with the Corps since the floods of 1986. I mean, it is a joke.

Now, maybe that is where the Congress is. Maybe we have come to a point where we are going to walk away from our national flood fighting responsibilities, but not if I have anything to say about it, and I hope there are people on both sides of the aisle who feel the same way.

I realize that there will be people who will not want to agree to the premise and yet not want to put any money up, either. That is not a particularly encouraging approach to have it both ways. I am certainly going to hope that this committee will somehow find it within its purview to put some money on the table as well as to do more than just keep your role in fictitious terms so that we really put some money behind what we say, when we say we want to continue the national flood fighting responsibilities. I would say—Dr. Zirschky, do you want to comment?

Mr. ZIRSCHKY. We are concerned about a lot of the scenarios you raise, and that all the agencies need to reduce spending in their budgets, and we would prefer to pick those areas to focus on so we don't have a cut across all of our programs. We still have additional savings that we need to identify and would look forward to working with this committee and our authorizers in finding out how we can achieve the rest of our deficit reduction targets.

ADDITIONAL SAVINGS

Mr. FAZIO. How much more do you still have as a target?

Mr. ZIRSCHKY. About $940 million.

Mr. FAZIO. The 870 or so million dollars I saw identified in the President's budget was over five years; is that correct?

Mr. ZIRSCHKY. Yes, through fiscal year 2000.

Mr. FAZIO. We have begun with about $100 million this year in the 1995 to 1996 year, about $100 million reduction, ramping up to that?

Mr. ZIRSCHKY. Twenty-nine million dollars I believe.

Mr. FAZIO. Is that all? I was taking a quick look at the cover sheet here and I thought I saw that much. It is a very rapid ramp up, then, from $29 million to $870 million in a five-year time frame.

Mr. ZIRSCHKY. You don't get many savings in the first year of a construction project. It is when you actually get heavy into the construction that the major expenditures occur.

COMPLETING STUDIES

Mr. FAZIO. Why are we going through the charade of finishing all these studies if we are not going to ever do anything? The traditional critique of the Corps is all we do is spend money on studies anyway, and now, of course, all we have agreed to do is continue to do the studies.

Is that on the premise that some day the world will turn on its axis again and we will get some more money and we will go back to the old ways? Is that what that is about or is this just that you don't know how to gracefully extract yourself from the real world?

Mr. ZIRSCHKY. The local sponsor could decide to terminate a study. However, we believe that by finishing the studies they will get some benefit. For example, they may need permits, and the environmental impact statements that go along with that will help them in their efforts. The feasibility of, say, looking at options would help them determine where they want to go once they take over the project, so we think they will get some value out of completing the studies.

NEW CRITERIA

Mr. FAZIO. I suppose if they want to pull the plug, they know how to do that. It is just a matter of whether or not you are going to be involved to that minimal degree at all. I have other questions, but I will wait for the next round, but I just want to say when I look at a community that I represent, you know, $38 billion in assessed valuation, 400,000 people vulnerable to flooding, we can't find that of national significance while we can go to some other area and take on a project just because more than half the water flows over the State line, it doesn't make sense.

It is so arbitrary, I said, you know, sotto voce. It was designed to fail. Whatever this criteria is, it makes no sense, 2 to 1 BC ratio. How many projects do you think we have done with less than a 2 to 1 ratio?

Mr. ZIRSCHKY. I would guess that most of the flood protection projects have less than a 2 to 1 ratio.

Mr. FAZIO. Funny thing. It is just a disaster. Maybe this committee needs to take a very sobering look at how we can fix the problem because, after all, we are part of the reason why this kind of budget has to be presented. I don't want in any way to remove our responsibility from this, but this is, in my view, a nonstarter, and I certainly look forward to working with Chairman Myers and other members of this committee to see what we can do to try to get the Corps back on track because I happen to be a believer that the Corps has a proud past and a very significant future, and I don't want to buy into complete surrender, a capitulation, which is what I consider this budget to be. And while I say that, I don't want to be perceived as just critical of the administration.

I am not one who does that for fun and profit, but I am willing to do it when it is appropriate and it is appropriate on this occasion. But it is also, I think, a signal that has to be sent to this Congress about how it has to pick up its responsibilities as well. Thank you, Mr. Chairman.

Mr. MYERS. Thank you, Mr. Fazio.

Mr. Riggs.

Mr. RIGGS. Mr. Chairman, can I defer to Mr. Frelinghuysen since I arrived late.

Mr. MYERS. Mr. Frelinghuysen.

NEW POLICIES

Mr. FRELINGHUYSEN. Thank you, Mr. Chairman. Let me echo some of the sentiments certainly that Mr. Fazio raised and others on the committee. Who, in fact, Mr. Secretary, developed the new policies on shore protection, flood control and recreational harbors?

Mr. ZIRSCHKY. I don't know the specific individual. I believe it was a collaborative effort amongst the administration.

Mr. FRELINGHUYSEN. Well, was the Army Corps at the table?

Mr. ZIRSCHKY. We did provide some of the information used to make these decisions.

Mr. FRELINGHUYSEN. So you are saying that you provided some information, but the Army Corps didn't sit at the table during these deliberations?

Mr. ZIRSCHKY. The overall initial starting point about redefining what is a Federal and what is a local responsibility was made before we became involved in the process.

Mr. FRELINGHUYSEN. I don't understand. How could you have absented yourself from your historical responsibilities?

Mr. ROGERS. If you are not asked.

Mr. FRELINGHUYSEN. The administration basically did not ask you to participate?

Mr. ZIRSCHKY. We did when they were trying to—we need to provide savings in spending.

Mr. FRELINGHUYSEN. So these new policies are to your mind based on or driven by budgetary or environmental?

Mr. ZIRSCHKY. Budgetary as well as focusing on missions, of what an appropriate Federal role is. We did—for example, the proposal to shift the 404 Regulatory Program to the States was an example of one of the proposals that we made as an area where we could save money. That was one that we put forward.

Mr. FRELINGHUYSEN. Did anyone suggest to you that some of the current work that the Corps is undertaking perhaps might be damaging the environment?

Mr. ZIRSCHKY. Not in the scope of these discussions, but that has been raised before.

Mr. FRELINGHUYSEN. It has been raised. Do you believe in those comments?

Mr. ZIRSCHKY. Yes, there are some things that we have done that have been damaging to the environment and that we are expending money to try to fix. The Everglades, for example, restoration, our channelization of south Florida has, in fact, had a deleterious effect on the Everglades, so we are going to go back and try and restore that, and I think we are doing a great job of doing that.

WORK TO BE STOPPED

Mr. FRELINGHUYSEN. What percentage of work currently under way would be eventually stopped or terminated if we were to embrace these policies and can you give us a year-by-year breakout?

Mr. ZIRSCHKY. We can provide that for the record.

[The information follows:]

STUDIES AND PROJECTS TO BE STOPPED AS A RESULT OF THE NEW POLICY

Of the total of 254 studies and projects included in the fiscal year 1996 budget request 10% would be stopped after fiscal year 1996 because they would have completed their current phase e.g. reconnaissance, feasibility, or preconstruction engineering and design. In subsequent years: FY97, 7%, FY98, 7%, and FY99, 11%, of the studies and projects included in the fiscal year 1996 budget request would be stopped because they would have completed their current phase. These stoppages, of course, are based on the assumption that none of them would meet the criteria for being continued, under the new policy.

INVESTMENT IN PROJECTS

Mr. FRELINGHUYSEN. Could you provide for the record what has been invested in these projects?

Mr. ZIRSCHKY. Yes, sir. Historically, we also have some information about what we have invested in.

Mr. FRELINGHUYSEN. How about giving us a ballpark figure right now in these general categories.

Mr. ZIRSCHKY. In terms of flood protection we believe, not in constant dollars, in the dollars when invested, about $30 billion have been invested in flood protection projects.

Mr. FRELINGHUYSEN. So there is a potential if these new policies might be embraced, we might lose that investment.

Mr. ZIRSCHKY. No because those projects are already on the ground and built.

Mr. FRELINGHUYSEN. What about the ones that are in the pipeline? Those are substantial investments. Could you quantify that?

Mr. ZIRSCHKY. I believe about $400 million will be saved by not starting the new flood control projects.

Mr. FRELINGHUYSEN. But what about the ones that are under way.

Mr. ZIRSCHKY. Those already under construction we will finish. Those that are in the study process we will get you more information for the record.

[The information follows:]

FEDERAL INVESTMENT IN STUDIES AND PROJECTS

The estimated Federal investment through Fiscal Year 1995 in the studies and projects affected by the proposed policy is $265,382,000.

STAFF REDUCTIONS

Mr. FRELINGHUYSEN. If these policies were adopted, how much—are you going to reduce the Army Corps workforce by how many, 196 full-time?

Mr. ZIRSCHKY. In addition to our previous downsizing goals. That is the only number that is certain, is that for fiscal year 1996 an additional 196 FTEs.

Mr. FRELINGHUYSEN. Is that calculated into your 925-million-dollar savings over five years?

Mr. ZIRSCHKY. Yes.

AUTHORIZING LEGISLATION

Mr. FRELINGHUYSEN. As you are aware, the House is currently putting together the Water Resources Development reauthorization Act for 1995. Will Congress have to approve these policy changes or will the Army continue to use these changes when deciding whether to budget for certain projects?

Mr. ZIRSCHKY. The administration will continue to use these policies when deciding what to budget, but the authorization committee will have to formally change the cost sharing requirements from 75 percent Federal to 75 percent local.

Mr. FRELINGHUYSEN. That is the only aspect that needs to be changed in order for you to adopt these policies?

Mr. ZIRSCHKY. Yes, because primarily we would not budget for them. However, we will submit legislative specifications to propose deauthorizing the continuing authorities program and we will probably need some authorizing language to help us look at turning over some of our reservoirs to the State government.

Mr. FRELINGHUYSEN. I have other questions, Mr. Chairman. I will get to those next time around.

Mr. MYERS. Mr. Riggs.

NEW POLICIES

Mr. RIGGS. Thank you, Mr. Chairman. I would like to note for the witnesses that I scrambled to come back this morning on a red eye from California after a busy four-day work period with an open mind and believing that I would hear some sort of concrete rationale for the Corps budget proposal and am incredulous to hear that, number one, you sound very defensive of this budget proposal; and, number two, I believe just a moment ago you seemed to imply that the proposal was based or driven at least in part by environmental considerations. Is that correct?

Mr. ZIRSCHKY. Well, there is a large investment in the environment in our budget, but the new policies for flood protection were primarily driven by the Reinventing Government effort to reexamine the appropriate role of the Federal Government and to help us achieve deficit reduction targets.

Mr. RIGGS. Let me share the bipartisan outrage of my colleagues on this subcommittee. To take Mr. Fazio's analogy a step further, it is not that you have taken the local sponsors of the projects to the altar and then abandoned them. To the contrary. We are well beyond the honeymoon night. You have consummated the relationship, in my view, and have now walked away from that relationship and I don't believe that the Corps of Engineers intends to be the father of deadbeat dads, does it?

Mr. ZIRSCHKY. We are exploring options on where we go from here.

INVESTMENT BY SPONSORS

Mr. RIGGS. Another question—can you quantify, piggybacking on the earlier question, what the hard match on part of the local sponsors has been in the projects that you propose now to abandon.

Mr. ZIRSCHKY. In flood protection, 75 percent Federal, 25 percent non-Federal and the non-Federal also has to supply the land easements rights of way, which can take it up to 50/50.

Mr. RIGGS. I realize the formula, but in terms of an actual dollar amount, what is the investment made today on the part of local sponsors in these projects that you hope to abandon?

Mr. ZIRSCHKY. I will have to get that for the record.

[The information follows:]

NON-FEDERAL INVESTMENT IN STUDIES AND PROJECTS

The estimated Non-Federal investment through Fiscal Year 1995 in the studies and projects affected by the proposed policy is $52,276,000.

NAPA RIVER PROJECT

Mr. RIGGS. You are going on record today as saying that, for example, I will pick a project from my congressional district, the Napa River Flood Control Project. The Napa River has flooded, 12, according to background information, actually 13 times between 1862 and the present, the most recent flooding being, of course, the floods of 1995.

The most recent severe flood was in February of 1986 when California had a hundred year flood or what I believe the Corps of Engineers estimated as a 55-year event. That flood, the damage caused by that flood in Napa County, property damage, was $100 million, three people killed, 27 injured, 250 homes destroyed and another 2,500 residences damaged county-wide.

You are saying that the continuation and completion of that project with the Corps and the Federal Government participation is not of national significance or a national budget priority? You can take my word for it that it is one of the projects.

Mr. ZIRSCHKY. If it is not under construction, we would at the end of the feasibility——

Mr. RIGGS. What message would you suggest I take back to my constituents regarding the $15 million investment made to date and what message should I give them with respect to the financing mechanism that has been put in place locally in anticipation of continuing and completing this project.

The local sponsors have come up with, I think, an innovative proposal to raise the hard match required for completion of construction of that project and it involves a graduated tax for those property owners closest to the river. Those who theoretically would benefit the most would pay more than those further away from the river but remaining in the river basin drainage.

What message should I take back to them at my next meeting in Napa. Since this came up at a town meeting yesterday in Napa, what message should I take to convince them that that project is really not worthy of continued Federal Government backing?

Mr. ZIRSCHKY. Hard choices need to be made in order to achieve the deficit reduction targets and that local governments will have to assume some of the responsibility that——

Mr. RIGGS. Local governments have been assuming some of the responsibility, as I think you would agree. So the upshot is it seems like someone somewhere in the administration has arrived at a rather capricious and arbitrary decision with, frankly, unworkable standards and I completely agree with the conclusion that this proposal is a nonstarter, is unhelpful to us in terms of performing our task as members of this subcommittee and members of the full committee in terms of reducing the size and the scope and the cost of the Federal Government with an eye towards eliminating the deficit and balancing the budget.

Mr. Chairman, I yield back at this time.

REINVENTING GOVERNMENT

Mr. MYERS. Thank you. I think we have recognized and heard that every member of this subcommittee is quite concerned about implementing the Reinventing Government. We realize we have to do something about cutting spending, but for this particular one it seems like there is a long-standing obligation that the Federal Government has to do something about helping folks control their water. Something that bothers me now is the fact that you have implemented these provisions of Reinventing Government or national significance into your budget this year; is that correct?

Mr. ZIRSCHKY. Yes.

Mr. MYERS. Even though there is no authorization. The things that you suggest is going to take legislation, is it not?

Mr. ZIRSCHKY. To change the cost-sharing formula, to deauthorize some of the programs, yes.

Mr. MYERS. You are preparing legislation now; is that correct?

Mr. ZIRSCHKY. I don't know whether it will be an actual bill, but legislative specifications talking about what would need to be changed.

Mr. MYERS. You have no input into that one either?

Mr. ZIRSCHKY. We are preparing that in accordance with the administration's guidance.

Mr. MYERS. When will that happen?

Mr. ZIRSCHKY. I am not sure.

Mr. MYERS. As soon as they appoint a permanent Secretary. We can wait awhile. The thing that bothers me is the fact that you are terminating, it looks to me like—General Williams, in your testimony, I think there are a number of general investigations that are going to continue and 2 new construction starts. Those fit into this criteria of 75–25 and more than 50 percent of the water? Is that correct, all these studies that you are going to continue under preconstruction?

General WILLIAMS. The budget is based upon the premise that we are going to implement the policies that Dr. Zirschky has submitted.

Mr. MYERS. The local sponsor pays for the general investigation. It paid for part of the preconstruction engineering. And if you are going to terminate them, isn't that going to cause some problems with local government? Aren't they going to bring some suits against you? They put the money out in good faith and you reneged on your side of the contract.

Mr. ZIRSCHKY. Most of our agreements set up are subject to the appropriation of money. We can't make guarantees as to what money will be available.

Mr. MYERS. You are going to blame us?

Mr. ZIRSCHKY. No. I believe we will take our share of responsibility. It is clear that we have chosen not to budget for these.

Mr. MYERS. That is rather clear at this point anyway. I think we have got some real problems coming down the road here. How soon are these local sponsors going to be notified that you are going to pull the plug on them?

Mr. ZIRSCHKY. I think many are aware of these policy changes.

Mr. MYERS. I don't think we have heard from too many of them.

Mr. FAZIO. Not yet.

NATIONAL WATER SUPPLY ASSESSMENT

Mr. MYERS. I think you are wise not letting them know because we may have a new Secretary before this happens. I am not blaming you for this, but the timing of the thing—now, to follow up on the concern about national water studies, there have been water studies upon water studies.

You are asking for a reprogramming of $500,000 to start this year. Generally this committee—this is a new start—has not allowed new starts on a reprogramming basis. I think one exception may be last year because of a national emergency. Of the thousands of local communities that provide water, how are you going to be able, with the little amount of money that you are asking for, to develop a study that means anything to them?

Mr. ZIRSCHKY. There are two parts. The money we are asking to reprogram for 1995 is to help us scope and come up with a design for the study that will be of use to the intended audience. There hasn't been a national assessment since the late 1970s. There were several during the 1970s. The one we participated in was the most accurate, which is why the administration decided to support us in this current effort.

At many of our projects, lack of water is as important as too much water. In Alabama, Georgia, Florida, and elsewhere we are involved in multiple efforts to try and figure out what to do about water from our 400 reservoirs, all of which someone usually depends upon for water.

The Missouri River master manual, another major effort to determine how we allocate the water. In the Pacific Northwest, we are involved in a multiyear effort to determine how to use the water in those dams. That area of the country has had a number of years of low rainfall. Even Seattle has had water shortages, something that 20 years ago nobody would have envisioned. We are just trying to use our expertise in hydrology help people protect what is coming in the future so they can better plan for their needs.

Mr. MYERS. Doesn't USGS also provide similar service?

Mr. ZIRSCHKY. Yes.

Mr. MYERS. How did they pick you instead of them?

Mr. ZIRSCHKY. We would propose to do it with input from a number of agencies, with us being the lead. In the late 1970s, we worked with the USGS. They were part of the team that came up with the most accurate estimate.

Mr. MYERS. I remember the Water Resources Council was given the lead on that, but I have to go back and look. It seemed like they didn't do it. They were just the lead and they contracted out to somebody. They didn't do a national study; they went to larger cities. That seems to be what is going to happen here.

The limited resources you will have you couldn't go to every community. And I think New York City, for example, is probably a yard ahead of you on that. They are bringing water in from way out, with tunnels they have built and are still constructing. I fail to see the importance of this, the national significance of this water. Everybody needs water, but primarily it will be local government's responsibilities to provide that water and always has been.

Mr. ZIRSCHKY. We are not proposing to provide them water, just to do sort of a national assessment about where is our national water situation headed. Ground water is being depleted in a number of areas.

Here in Maryland, for example; communities that used to be summertime communities like Ocean city, their aquifer would recharge during the winter. Now, they are becoming year-round communities and the aquifer is being depleted. We believe that by looking 10, 20, 30 years into the future we can hope to avoid some of the future costs that will be associated with lack of water and help us better plan for how we operate our reservoirs to save water fights from happening.

HARBOR MAINTENANCE TRUST FUND

Mr. MYERS. General Williams, the Harbor Maintenance Trust Fund is building up a big surplus. Surpluses makes our national budget look better because we have a big surplus. Who decides when money can be spent from that account for maintenance of a harbor?

General WILLIAMS. We have to request the Treasury for the money to be transferred, but the decisions are made through a cooperative effort through the Corps of Engineers and the particular projects in which the States are involved.

Mr. MYERS. So it is not an easy process to decide you are going to spend money on maintenance of a harbor, dredging or whatever it might be.

General WILLIAMS. We go through analysis with regard to whether benefit costs of the dredging is needed and then there is a request for the funds to be transferred.

Mr. MYERS. We have to come back to appropriate the money, but how does it get into the channel to come to us? Do you have some requests that are turned down?

General WILLIAMS. I am not familiar with the details of any requests that we have turned down right now. I don't know if General Genega is aware. I am not aware of any that has been turned down.

Mr. MYERS. Mr. Fazio.

FLOOD CONTROL CRITERIA

Mr. FAZIO. Let me get back to this criteria where State lines become so all important. When we look at disasters, they fall wherever nature decides they are going to. Are we looking at the potential cost to the Federal Government through FEMA disaster relief or mitigation as a result of disasters when we try to establish this criteria?

Mr. ZIRSCHKY. When we prepare a benefit cost ratio, we look at damages that would be avoided. However, we don't cover all things FEMA would cover. We do look at the flood damages.

Mr. FAZIO. As I understand it, part of the Corps' purpose is to help reduce the potential cost to the Federal Government in the aftermath of a disaster as relates to flooding. I find it hard to understand why we can't factor in losses to the Treasury which are inevitable when we try to put some sort of cost benefit ratio together.

Is it fair to say that disaster costs are not included in this 2 to 1 ratio requirement or any other ratio that the Corps has used?

Mr. ZIRSCHKY. Some of the disaster costs are included, but not all of them.

Mr. FAZIO. How would you make a distinction when you say some, but not all?

General GENEGA. For example, it is not always clear what payments FEMA is going to make. Last year, there was a bill revising crop insurance and thus the Federal Government's obligations; also the individual Flood Insurance Program was modified by the Congress last year at the administration's request. Additionally, there are issues such as cost sharing.

In Hurricane Andrew, the President waived cost sharing, for example. I don't think that was done during the Northridge earthquake, for example. But there are a number of variables in there and policies and statutes changing with regard to what FEMA does and so that would account for the piece that Dr. Zirschky answers as not being totally a part of the benefit and cost calculation.

Mr. FAZIO. So at least based on your current understanding of what the authorizing law requires of FEMA, for flooding purposes you do factor that into the cost benefit ratio?

Mr. ZIRSCHKY. Partially, yes.

Mr. FAZIO. But to the extent that those projects don't meet other criteria, they are still not taken care of. So in other words, regardless of what potential damage may occur in Napa or in Sacramento Valley or if it had come along a few years later in Orange County, it wouldn't have mattered.

Mr. ZIRSCHKY. That is correct.

Mr. FAZIO. Anything that occurs in south Florida would not matter?

Mr. ZIRSCHKY. That is correct.

Mr. FAZIO. Anything that occurs in most of the storms that fell in Texas this year wouldn't have mattered?

Mr. ZIRSCHKY. That is correct.

Mr. FAZIO. Does that make any sense if we are worried about holding the taxpayers harmless from regularly occurring ongoing costs of disaster relief in much of the country? I gather you are going to submit a response for the record?

Mr. ZIRSCHKY. I prefer to.

Mr. FAZIO. I would prefer to if I were you as well.

[The information follows:]

FLOOD PREVENTION VERSUS DISASTER RELIEF

Long term flood prevention should be part of any community's plan for development. The proposed policy is that responsibility for implementation of flood protection works should be at the local governmental level whenever it is within its institutional ability. At the same time the resources of the Nation should stand ready to provide relief for areas that experience extreme events that may be beyond the immediate ability of the local governments to respond to the needs of their citizens.

COMPLETION OF STUDIES

Mr. FAZIO. I am a little concerned about this willingness to finish studies. If you are in a reconnaissance phase, you won't move to a feasibility phase. You would only finish the reconnaissance. If you were in preconstruction and engineering design, you would finish that, but you would not move to construction; is that right?

Mr. ZIRSCHKY. Yes.

NEW STARTS

Mr. FAZIO. You have a no new starts policy?

Mr. ZIRSCHKY. We have several new starts, but they are just not in flood protection.

Mr. FAZIO. They are only in environmental mitigation; is that correct?

Mr. ZIRSCHKY. I don't believe there are any new starts in environmental mitigation.

Mr. FAZIO. Give us a bit of background about what we are actually doing this year in the new starts area because this is always a controversy before this committee.

Mr. ZIRSCHKY. We have several new starts. In construction we have one for Abiqui Dam in New Mexico putting in emergency gates in that dam.

Mr. FAZIO. So it is a safety issue?

Mr. ZIRSCHKY. Yes. Los Angeles Harbor, we are proposing to start new work in the harbor.

Mr. FAZIO. You consider that an ongoing authorization. Therefore, you don't have new criteria here.

Mr. ZIRSCHKY. Commercial navigation of these harbors is considered of national significance.

Mr. FAZIO. I happen to agree with that. I am glad we have found some area of common understanding.

Mr. ZIRSCHKY. As a separable element, we are replacing a Federal highway bridge over the Atlantic intercoastal waterway. We are proposing to do some major rehabilitation of three powerhouses in our dams.

Mr. FAZIO. What are you doing at the power plants?

General GENEGA. In part upgrading where that is cost effective, but basically on these we are replacing generators that are on the order of 30 to 40 years old.

Mr. FAZIO. Which dams?

Mr. ZIRSCHKY. Hartwell Lake and Jim Woodruff Lock and Dam in Florida and Georgia, the Thurmond Lake Powerhouse in Georgia and South Carolina. They are all in the Southeast. We are also proposing to start major rehabilitation of two locks and dams, numbers 14 and 24 on the Mississippi River.

Mr. FAZIO. So they are essentially kind of ongoing O&M activities at existing facilities, upgrading, improving, safety improvements?

General GENEGA. They are funded under construction general, sir.

Mr. FAZIO. That is pretty much what I have described them as. They are funded under construction, but we are not breaking any new ground here. We are basically trying to improve efficiency of existing facilities; is that right?

Mr. ZIRSCHKY. Yes, sir.

AMERICAN RIVER

Mr. FAZIO. Let me go back to the American River study which you have been doing. It looks like now for purposes that will be hard to defend, but certainly on the premise that this committee in its common purpose to redirect this budget will restore to some degree the normality that has existed, we will go back to wanting to build projects of national significance, in my view, even though they may occur within one State.

We are very concerned about the time for congressional review and action on the American River study. We are particularly focused on the Water Resources Development Act of 1996, which we anticipate being put together. Could you give me an update of the American River project schedule at the moment on the premise that this is of value at some point in the future?

General GENEGA. Yes, sir. The track that we are on at the moment, there are a number of activities going on, for example, the Section 10 permit by the Sacramento Area Flood Control Agency and with the Fish and Wildlife Service producing the Habitat Conservation Plan, our look at the supplemental information report and the two alternatives, the addition alternative being non-dam alternatives. That is coming together.

We expect the final selection on the plan about the middle of this year. The local authorities are now working on the support for the various alternatives. Based on the time line we are on right now under the old policies, we would be looking for a new start of construction in fiscal year 1998.

Mr. FAZIO. Do you think this schedule could be adhered to? Will we have slippage that might make it difficult for us to have our options on the table for the 1996 Act?

General GENEGA. I believe it is a doable schedule, but there are two major obstacles that have to be overcome, each of which could cause a major effect on the schedule. The first is the Section 10 permit, the Habitat Conservation Plan. If the agencies don't agree on that, that could cause major difficulties.

Second is the alternative selection, which is controversial depending on where one stands on a dam alternative or non-dam alternative and the impacts of those. So we are on a time line, which I think allows for adequate public input and under normal circumstances would allow us to meet those dates, but there is potential for them slipping.

Mr. FAZIO. This committee, at my urging over a number of years, has provided funding, supplemental funding, reprogrammings, anything requested and I thank my colleagues in both parties for that. But I want to know whether or not we need to do any more and why we would need to provide any additional money.

This is an ongoing important project and I would hope that we have provided the resources, even though I must regretfully say they are rarely in the budget, because we always need more. I would hope that we are ready to produce a product that gives the community and the Congress some real options to choose from without having to put any additional money out in order to get that product.

General GENEGA. I think we are at that stage at the moment. At the moment, we have the resources to do what I described to you.

Mr. FAZIO. If there is slippage, any problems that would prevent the community and the Congress from acting, I hope you will be proactive and come to us immediately upon determining this and let us know. I don't want this community to go another wet rainy winter like the one that we have had without having answers that at least give the community the alternative directions it might take.

General GENEGA. Yes, sir.

Mr. MYERS. Mr. Rogers.

REORGANIZATION

Mr. ROGERS. I think I have got this figured out now. You have had trouble reorganizing. We went through all that reorganization debacle. You have finally figured out the only way to do that is to deorganize. This will allow you to close down a lot of major divisions that serve only one State like Sacramento, and Los Angeles and Galveston and some other major divisions, will it not?

Mr. ZIRSCHKY. Some of those district offices serve other missions like navigation. I know Galveston works on the intercoastal waterway. Sacramento, I think, may work on some navigation projects as well. We have been basically downsizing our offices based on work load so those that would be heavily involved in flood protection would lose their work load, and therefore would be downsized.

Mr. ROGERS. There goes that theory. I am still having trouble figuring it out. Let me get back to the question that Mr. Frelinghuysen brought up. I would like to know where this idea originated; that is to withdraw, to abdicate your responsibility in flood protection and only do projects of "national significance". Was that a concept that you proposed to OMB or is this one that they came to you with?

Mr. ZIRSCHKY. We did not propose it to OMB.

Mr. ROGERS. So I take it they proposed it to you.

Mr. ZIRSCHKY. Yes. We worked with them.

Mr. ROGERS. I want to get to the bottom of this. Did they propose this concept to you and ask you to give them figures that would prove their theory?

Mr. ZIRSCHKY. Yes.

Mr. ROGERS. So it was their idea right?

Mr. ZIRSCHKY. I don't know whose idea——

Mr. ROGERS. That is a yes-or-no answer.

Mr. ZIRSCHKY. Maybe someone else came up with it.

Mr. ROGERS. It was not the Corps of Engineers' proposal?

Mr. ZIRSCHKY. No, sir.

Mr. ROGERS. No one in the Corps is the father of this idea?

Mr. ZIRSCHKY. Not to my knowledge.

Mr. ROGERS. The only thing you know is that OMB contacted you and said, "Here is our concept"; right?

Mr. ZIRSCHKY. Yes, sir.

Mr. ROGERS. "We want you to tell us the dollar figures in your division that this would mean."

Mr. ZIRSCHKY. Yes.

Mr. ROGERS. I want to be clear about whose idea this is. So here we have the historic role of the Corps of Engineers to help local communities who are facing devastation and catastrophe beyond their capability or their State to afford, who with no other recourse turn to the Federal Government for help. And over the history of this country the U.S. Congress, starting with Henry Clay's American plan, good Kentuckian and a good plan, said the Federal Government is going to help you do something that you simply cannot afford to do yourself and that is to save yourselves from periodic flooding. And for the first time in history of the United States an administration is approaching to abdicate that basic responsibility; am I correct in that?

Mr. ZIRSCHKY. I don't know about the history, but we are proposing that it is more appropriate for the local governments——

Mr. ROGERS. Has it ever been proposed before in the history of the country?

Mr. ZIRSCHKY. Not to my knowledge.

Mr. ROGERS. Has it ever been presented to the Congress by the Corps of Engineers in the history of the Nation?

Mr. ZIRSCHKY. Not to our knowledge.

Mr. ROGERS. How do you feel about that? Your historic view.

Mr. ZIRSCHKY. Sir, we, as part of the Army, support the administration.

Mr. ROGERS. What do you propose to do about these poor communities that have put up their share of the money on a signed contract with the Corps where they raised their money and the project got started and you signed that you would match it and you would see it through and you would supervise it with your expertise and the majority of the funding. What is going to happen to those contracts? Are we saying our word is no longer any good to those communities?

Mr. ZIRSCHKY. On those where we signed a project cooperation agreement for construction, we would continue. The feasibility cost-sharing agreements we signed do not obligate the government to continue past the feasibility study phase.

Mr. ROGERS. You are going to continue those you say you have a project cooperation agreement on?

Mr. ZIRSCHKY. Yes. I believe there are some that the administration has historically not supported as part of the project cooperation agreement, a requirement that the money be appropriated.

PROJECTS NOT FUNDED

Mr. ROGERS. I have looked through the list and as I heard your testimony, projects currently in the construction phase have been budgeted for, but I can't find any that are—I can't find any in my district that you have funded although they are under construction. What is wrong with my poor people?

Mr. ZIRSCHKY. The Section 202 Program, because of the economics of those projects, have traditionally not been budgeted for and it was determined that we would continue that policy.

Mr. ROGERS. Let me get this straight. For example, in Harlan County, Kentucky, you are about halfway finished with that project; isn't that right?

Mr. ZIRSCHKY. Yes.

Mr. ROGERS. How much have you spent on that project so far?

Mr. ZIRSCHKY. $96,500,000 roughly.

Mr. ROGERS. You are about half finished and you are going to stop it just like that?

Mr. ZIRSCHKY. Yes, sir.

Mr. ROGERS. What will be the benefit to the people of that community and that region for the 96.5 million dollars that you have spent so far if you stop right now?

Mr. ZIRSCHKY. I don't know.

Mr. ROGERS. I can tell you. Zero. You are about ready to finish the flood wall. You are about ready to put the gates in. You have spent all that money. You have dug tunnels. It is an ingenious project. It is desperately needed and you are going to stop in the middle, leave those unfinished flood walls, with the gates left off the flood wall and the floodwaters to pour through and the administration says sorry; is that it? Can you say anything more than that—sorry?

Mr. ZIRSCHKY. No.

Mr. ROGERS. And there are others in that same category just in my district, not to mention around the country. I find it absolutely the height of irresponsibility. I can't imagine, politically, I can't imagine someone in high office doing this to their people. Can you help me out with that? Is there some hidden agenda here that I am not aware of?

Mr. ZIRSCHKY. No hidden agenda that I know of. I believe they are just continuing the budgeting priorities of the past administration as well as as far as the Section 202 projects.

Mr. ROGERS. Well, proposals that the Congress threw out the window.

Mr. ZIRSCHKY. Yes, sir.

Mr. ROGERS. And decided nationally, the people of this country have decided these are the projects we are going to do whatever the administration thinks about it, and we funded them. Now, you are saying, sorry, we are going to cut you off altogether under proposals that have not been approved by the Congress. The Public Works Committee, I assume, doesn't know about this yet do they?

Mr. ZIRSCHKY. I believe they are aware of it.

Mr. ROGERS. You have not had hearings on it yet.

Mr. ZIRSCHKY. On the Senate side, but not on the House side.

Mr. ROGERS. Apparently, you have not testified yet before them because you have both your arms. I am just sorry that we have to come to this. We will have to write your budget in toto here and that is unfortunate because we would liked to have depended on your expertise, but you have been prevented from doing that by the White House. I think that is a disgrace. I think I have used up my lexicon of adjectives so I am going to quit.

Mr. MYERS. I think you did very well.

Mr. Riggs.

DREDGING PROGRAM

Mr. RIGGS. Thank you again, Mr. Chairman. Maybe we can shift the focus just a little bit for a few minutes. I am curious to hear from you gentlemen with respect to how you perceive the future mission of the Corps of Engineers with respect to dredging, and what you see happening there in terms of funding levels in the out-years.

Mr. ZIRSCHKY. At present we are proposing to stop maintenance of harbors that don't contribute to the Harbor Maintenance Trust Funds, recreational harbors primarily. We need—we have additional deficit cutting to meet so I can't make promises about what we are going to do or not do in the future. However, the Harbor Maintenance Trust Fund pays for those activities and we would envision that support for that program would continue.

We need, however, to work with the Congress to identify where we find the additional budget savings that we need. Unlike other agencies, we are not program funded. We are project-funded so we have to determine what missions it is that we are going to go forward and do because in this climate of deficit reduction we can't continue to do everything we are doing. We are looking for uneconomic projects and have saved a few million dollars and that doesn't get you near deficit reduction——

DEFICIT REDUCTION

Mr. RIGGS. When you say you have deficit reduction targets to meet, are you referring to a five or seven-year plan that the administration is developing that would truly move us in a direction of a balanced budget?

Mr. ZIRSCHKY. As part of the budget submission they try to lay out a ceiling for the next four or five years for each agency to chart the future. I think the administration budget does lay out a plan to significantly reduce the deficit.

Mr. RIGGS. Is there a five-year plan then with five-year deficit reduction targets?

Mr. ZIRSCHKY. The administration lays out a glide path for reducing the budget. Other agencies are not as far along in the process of reinventing as we are so there is not the level of detail there is for us.

Mr. RIGGS. You talk in the budget proposal about giving responsibility for wetlands delineation and protection to the States. How do you see that actually happening?

Mr. ZIRSCHKY. The Clean Water Act sort of envisioned that 20 years ago. At present, however, only two States, New Jersey and Michigan, have a 404 Program. We are working with Maryland.

Part of the administration's wetlands plan is to work more effectively with the States to turn the program over to do more programmatic permits. We are looking at savings of $50 million if we can get the program transferred to the States.

Mr. RIGGS. Do you intend to signal the States with this budget proposal that you will be pulling out of wetlands delineation and wetlands enforcement regulations?

Mr. ZIRSCHKY. No. We will still do the 404 program in some areas as well as the Section 10 Program for the federal waters, but that the States would assume a great deal of the responsibility for running the program.

Mr. RIGGS. Would the Corps still be in the permitting business; that is to say project developers and local entities would still have to seek Federal Government approval through the Corps of Engineers?

Mr. ZIRSCHKY. Depending on what the water is some will be obtained from the States. If it is to put something in the middle of the Mississippi River, I would assume that would still need permit. An inland isolated wetlands in Michigan would be permitted by Michigan and not by us.

Mr. RIGGS. How do you intend to work with the Congress, then, on developing these new standards that would—thresholds that would determine whether or not States would be primarily expected to take jurisdiction over these upland wetlands versus navigable waters of the Federal Government, which I thought I just heard you say would remain under the jurisdiction of the Corps. How do you propose to work with the Corps and with the States? What is the process that you foresee?

Mr. ZIRSCHKY. The administration would have to work with the States. We envision that Congress will have a great deal of interest in the wetlands program over the next few months so that working with Congress is not likely to be a problem. We expect there is significant congressional interest.

Mr. RIGGS. Do you intend to develop and send a proposal?

Mr. ZIRSCHKY. I believe the President's wetlands plan for 1993 listed this direction. It has been out for a while.

AQUATIC PLANT CONTROL

Mr. RIGGS. Let me ask—I assume other members of the subcommittee, as well, received letters from concerned interest at the local level regarding the Corps also pulling out of the weed abatement business. What is the rationale there?

Mr. ZIRSCHKY. The Aquatic Plant Control Program, primarily the lakes are located within the boundaries of a State. Therefore the State should be responsible for control of nuisance aquatic vegetation.

Mr. RIGGS. What is the total amount of funding?

Mr. ZIRSCHKY. Nine million dollars.

Mr. RIGGS. Is that a program that also requires a local match?

Mr. ZIRSCHKY. 50/50 in some cases, yes.

Mr. RIGGS. You are basically proposing to turn that responsibility over to local interests?

Mr. ZIRSCHKY. Yes. To local and State governments.

Mr. FAZIO. Would you yield on that? Where is that money going? It used to go to Florida. Are we moving some out of Florida that 9 million dollars?

Mr. ZIRSCHKY. It does go to other areas. There is a lot of work in the Southeast, but I think we are working in Michigan. In the northern States I think it is Eurasia milfoil that we are helping to control.

Mr. FAZIO. We are dealing with the problem nationally. I would like that in detail for the record because the impression I had a few years ago was that the program was highly beneficial to one part of the country.

Mr. ZIRSCHKY. We can give you a State breakout.

[The information follows:]

AQUATIC PLANT CONTROL

	Fiscal year—	
	1994	1995
Control:		
Louisiana	576,000	600,000
Virginia	0	120,000
Vermont	55,000	0
Wisconsin	100,000	105,000
Washington	312,000	177,000
South Carolina	1,695,000	1,160,000
Florida	2,347,000	2,397,000
Puerto Rico	122,000	122,000
Alabama	70,000	80,000
Georgia	70,000	82,000
North Carolina	43,000	45,000
Texas	275,000	289,000
Control subtotal	5,665,000	5,177,000
Planning:		
Aquatic plant control operations center	100,000	100,000
Massachusetts	5,000	5,000
Tennessee	15,000	0
California	5,000	3,000
Planning subtotal	125,000	108,000
Research:		
Florida	2,000,000	2,500,000
Nationwide	4,000,000	4,000,000
Research subtotal	6,000,000	6,500,000
Aquatic plant control total	11,790,000	11,785,000

DREDGING PROGRAM

Mr. MYERS. Mr. Frelinghuysen.

Mr. FRELINGHUYSEN. Thank you, Mr. Chairman. I didn't get a clear answer relative to Mr. Riggs' question on dredging. What, in fact, is our national program? Do we have a national program?

Mr. ZIRSCHKY. Yes, we do have a national program. We dredge a large number of waters across the country. Our policy is we are focusing on those harbors that contribute to the Harbor Maintenance Trust Fund and not dredge the other harbors.

Mr. FRELINGHUYSEN. And this falls into the category of being nationally significant?

Mr. ZIRSCHKY. Yes, sir.

Mr. FRELINGHUYSEN. So last year when General Genega testified about the dredging of New York Harbor, he testified that we have a crisis and what has the Army Corps done relative to addressing that crisis? Does this fall within the parameters of what you have set out?

Mr. ZIRSCHKY. We would continue to do the dredging of New York Harbor. They contribute to the Harbor Maintenance Trust Funds. We have had permit problems. We have met with some of the members from that area. We were able to get a few permits out last year. A number of applicants have decided not to pursue permits. We still have work to do in that regard.

The administration announced the dredging strategy in December. We are now putting together a national dredging team which will follow along with the regional dredging team to try to resolve those issues. We are planning a tour—in Baltimore Harbor there is a containment island that may be an option for New York and New Jersey.

Mr. FRELINGHUYSEN. Many members of our delegation in New Jersey have come to be concerned about the New York Harbor and what it means to the economy of the region, which is nationally significant. So I would like to know particularly what you are doing in specific terms to resolve this crisis. Do you consider it a crisis now? Last year it was a crisis. What is it this year?

Mr. ZIRSCHKY. We have gotten some of the permits out so I guess it is less of a crisis, but the need for dredging continues to be met in New York Harbor. We are aware of that and are trying to focus our efforts on getting those permits resolved.

Mr. FRELINGHUYSEN. With the Chair's permission, I would like to submit a few questions relative to the National Dredging Program into the record and I also have one other additional question.

COMPUTER SOFTWARE

Currently the Army Corps is undertaking a commuter software upgrade; is that right?

Mr. ZIRSCHKY. We are doing a lot of work on computer software. Do you have a specific——

Mr. FRELINGHUYSEN. I understand that you are undergoing some major changes in terms of upgrading your software.

Mr. ZIRSCHKY. The Corps of Engineers financial management system?

Mr. FRELINGHUYSEN. Where does that stand?

Mr. ZIRSCHKY. We are in the process of trying to field that new financial management system. It is in the Southwest system, already at Huntsville, at the Waterways Experiment Station and we will bring it on line, at headquarters in April. We had problems with that system and we will be watching how well it works in headquarters in April to determine where we go.

GENERAL EXPENSES

Mr. FRELINGHUYSEN. Last year, the subcommittee reduced your general expenses account; is that right?

Mr. ZIRSCHKY. Yes, sir.

Mr. FRELINGHUYSEN. Can you tell me how you met that reduction and could you provide the committee, through the Chair, with the specifics?

Mr. ZIRSCHKY. Yes. We are in the process—we envision that we will be able to meet the reduced funding, not exceed that. We have downsized headquarters, particularly the civil works directorate has been downsized. We can provide more information for the record.

[The information follows:]

FY 95 MANAGEMENT ACTIONS

We budgeted $156.5 million for the FY 95 General Expenses (GE) account based on supporting 1,496 full-time equivalent (FTE) workyears at the HQ, 11 Division Offices, and four support activities. This workyear level reflects a 34 FTE reduction from the FY 94 authorized level. When the FY 95 Energy and Water Development Act (P.L. 103–316) was passed, the GE budget has been reduced by $4 million to $152.5 million: $2 million from the HQ, and $2 million from the Divisions and support activities combined. Since the GE account is 71% labor and 23% fixed costs, there is little discretionary funding to absorb budget reductions or unanticipated costs; therefore, a reduction of this size required additional staff cuts, primarily in the HQ.

The budgeted FTE distribution was 510 for HQ, 798 for Division Offices, and 188 for support activities. The FY 95 FTE levels already included the Federal Workforce reductions of 14 from the HQ, 14 from Division Offices, and 6 from support activities. The budget reduction of $2 million in the HQ funding level required an additional 13 FTE staffing reduction, for a revised HQ FTE level of 497, a total of 27 below the FY 94 authorized level. These reductions were net after absorbing 11 HQ spaces previously funded by Centralized Accounts. The affordable GE FTE is currently 1,483 FTE, a reduction of 47 GE FTE below the FY 94 level.

The FY 95 budget marked the mid-point in a series of reductions in Corps and HQ staffing that began in FY 1989 and will continue through FY 1999. From FY 89 to FY 95, the total Corps of Engineers Civil-funded workforce has been reduced from 29,931 FTE to 27,839 FTE, or approximately 7%. Consistent with Congressional intent, the GE funded workforce was reduced from 1,750 FTE to 1,485 FTE, or 15% during this same period. Within the GE reduction, the HQ went from 630 to 497, less the 28 FTE transferred from the Washington Level Review Center to HQ to consolidate policy review. The 497 FTE is a net reduction of 21% from FY 89, but an actual reduction of about 24% given the FTE absorbed as a result of direct-funding formerly Centralized Activities, organizational restructuring and mission realignment. In taking the HQ reductions, the Civil works Directorate has taken a proportioned share of these reductions.

NATIONAL PERFORMANCE REVIEW

Mr. FRELINGHUYSEN. I yield back my time if there is any. Thank you, Mr. Chairman.

Mr. MYERS. Mr. Fazio.

Mr. FAZIO. I wanted to go back to a point Mr. Frelinghuysen was getting at. I notice that in your effort to comply with the National Performance Review, you have indicated you have streamlined operations, centralizing policy review at headquarters, and yet I think the general thrust of that effort is to decentralize and move decision-making down to the local level regional district.

You indicated in response to Mr. Riggs' questions that there are States, for example, taking responsibility for wetlands designations. Do we have some discontinuity in policy here? Are we doing a little of both? Where is the distinction?

Mr. ZIRSCHKY. We are trying to delegate more decision-making authority. On the Continuing Authorities Program, division commanders will have that approval authority. It used to be my office.

The problem with projects is that they require legislative authorization, which means that typically when any agency needs legislative authorization their clearinghouse is in Washington. OMB, for example, is the clearinghouse for legislation, so those decisions still have to be made in Washington.

On O&M, we are trying to give project managers at the lakes purchasing authority so they don't have to go to the district office. We are taking technical review approval from divisions and putting that in district offices. So where we have ability to, we are trying to delegate that authority.

Mr. FAZIO. Do you need to come to Congress and ask for additional authority? From my experience with the Corps, the more we can keep decisions made locally the better, from the standpoint of time passing and money increasing in terms of cost to project, et cetera.

Is there anything we can do to help you further divest of the need to come to Washington for sign off on things that, frankly, ought to be resolvable at the local level?

Mr. ZIRSCHKY. Let me think about that one. The problem is that things that require legislative authorization are probably always going to have to come to Washington.

Mr. FAZIO. Give me a case study of what is a typical need for legislative authorization on something that is a local matter.

Mr. ZIRSCHKY. American Rivers, the feasibility study. The need for that study had to be congressionally authorized. There is the decision do we want to go forward with the construction or not. The administration submits a bill. That goes from us through OMB to determine if it is consistent with the administration's policies, a decision whether or not to start the project. So it is a legislative proposal rather than a decision whether or not to build. It gets new meaning because you need to get it authorized in law. That would be an example of——

ELEVATION OF PERMITS

Mr. FAZIO. That is a good example of where we often have a slowdown, I might admit, as it gets back here and is lesser priority particularly for agencies that don't have political leadership. But there is also the question of permits, not just 404, but other permits that the Corps of Engineers becomes involved with.

I see an increasing tendency to elevate sensitive permits to Washington because of environmental red flags that go up or what have you. Do you believe that is a continuing problem or is this something that we may only see here every once in a while and therefore I may be overreacting?

Mr. ZIRSCHKY. I don't know that we have had a numerical increase in the number of the ones that actually get elevated. We are trying to proactively get involved and solve some problems so the permits don't languish forever.

This last summer we had over 200 permits over two years old. We decided to get more actively involved and now we have only 80 permits over two years old so we cut it by more than half. We feel if we can get involved early, we can get things resolved so they don't go on forever.

General GENEGA. Just by way of perspective, I have been Director of Civil Works for about 2.5 years. In that time we have done about 130,000 to 140,000 permit actions, about a dozen of them elevated in Washington. The number in perspective is relatively small.

Mr. FAZIO. Is this increasingly brought about by the Endangered Species Act? What impact has that had on the Corps of Engineers permit authority?

General GENEGA. It does affect, sir—well, for example, the American Rivers project, where we have Section 10 consultation with Fish and Wildlife at the moment, so it does affect the projects, whether done by the State or local authorities or by the Federal Government. But that number 12, that has been spread over two-and-a-half years. It has not increased very dramatically recently. It is pretty well spread out.

Mr. FAZIO. I appreciate the degree to which you seem to be on top of the problem and trying to work it down. I may only become involved when it becomes a crisis and therefore I may have a misimpression as to how many of these we have, but I do appreciate the general attention to forcing down the decision-making and elevating as little as possible.

Mr. Chairman, thank you for giving me a third round. I am sorry C–SPAN isn't here today. We had cameras here the other day when we had a theoretical discussion of the work of this committee. It is too bad they couldn't be here today when we have a practical example of what this committee does.

I will ask Mr. Lamb of C–SPAN why they chose not to be here today. This is a good example of what happens when you attempt to balance the budget. I may not agree. In fact, I don't, with what you have put before us today, but the discretionary freeze that the administration has imposed and the desire to reduce spending on this kind of activity over time, even if it just tracks inflation, is difficult.

I would not think we need to go back and start again, but I think the kind of dialogue we have had today needs to get out to the American people. If they think this is an easy task, this hearing today may have disabused them. But sad to say, there is no one here watching today and I regret that because I think it is a prototype of what this committee and this Congress is going to have to struggle with, not just in terms of reducing spending, but dealing with the balanced budget amendment and other requirements that we and the country seem to want to impose.

I wanted to apologize to the four of you for having to bear some of that burden. At the same time, we couldn't hold our tongue in the face of a criteria that just doesn't fly, in my opinion, not just in a parochial way, but generally.

Mr. MYERS. Mr. Rogers.

SECTION 202 PROJECT

Mr. ROGERS. Thank you, Mr. Chairman.

Dr. Zirschky, I believe you said that the Army did not seek funds from OMB for any of the Section 202 elements?

Mr. ZIRSCHKY. We did seek funding for those originally.

Mr. ROGERS. And OMB turned you down?

Mr. ZIRSCHKY. Yes, sir.

Mr. ROGERS. On all of them?

Mr. ZIRSCHKY. All but one, sir.

Mr. ROGERS. Pray tell, who was that lucky soul or what project was that?

Mr. ZIRSCHKY. There is a project from Grundy, Virginia, where locals are cost sharing and it is not just as flood control, but also redevelopment working with the State DOT, HUD on that project.

Mr. ROGERS. So OMB, of all of the projects in the States covered under the Section 202 flood control projects, desperate projects all of them, only Grundy, Virginia, found favor at OMB?

Mr. ZIRSCHKY. Yes, sir.

Mr. ROGERS. Has there been a terrible flood problem at Grundy? Are people's lives being taken by flooding at Grundy?

General GENEGA. Yes, sir there is one correction. The Matawan element, which has been under construction since 1986, is also in there.

Mr. ROGERS. OMB looked favorably on Matawan in West Virginia?

General GENEGA. Yes, sir, that is correct.

Mr. ROGERS. I wonder why that was so. Now, how far along is the Grundy project?

Mr. ZIRSCHKY. It has not started construction yet.

Mr. ROGERS. It is a new start?

Mr. ZIRSCHKY. It would be, yes.

Mr. ROGERS. A new start.

Mr. ZIRSCHKY. It was added in fiscal year 1995.

Mr. ROGERS. How much is it going to cost?

General GENEGA. Sir I think I have a number on that. Total project cost of almost $80 million.

Mr. ROGERS. Grundy stands on the same legal footing as does Harlan and Williamsburg and Pineville and Middlesboro and so forth and the West Virginia projects, right?

Mr. ZIRSCHKY. Yes, although the Grundy project has cost sharing. The locals are going to put up about 25 percent. The non-Federal entities will put up about 25 percent.

Mr. ROGERS. But at the same time that you are going to start a new project under Section 202, you are going to shut down projects that you have spent millions on that are not finished and will afford no flood protection for what you have invested, as in Harlan. Am I getting that straight?

Mr. ZIRSCHKY. It will start construction in 1995 before the 1996 policies go into effect. Due to the fact that there is cost sharing and there is this unique relationship with Federal and State agencies we are going to be pursuing that project.

MODEL PROJECT COOPERATION AGREEMENT

Mr. ROGERS. Williamsburg, Middlesboro and Salyersville in my district are having a problem with this new model project cooperation agreement. Apparently, you are trying to develop a new form of some sort. Anyway, I am told it is really gumming up the works and that the communities have done all that you have asked them to do and yet this new model PCA has got everything all torn up, delaying the projects. Do you know anything about that?

Mr. ZIRSCHKY. Yes, sir. I think we are down to one issue, and that is about the resale of the land that they acquired for the project. We tried to work that over the weekend. I haven't gotten a briefing yet.

Mr. ROGERS. It is not the form itself. It is a substantive part of the negotiations?

Mr. ZIRSCHKY. We are down to the one issue of the ability to sell the land after they acquire it.

Mr. ROGERS. Like Mr. Fazio, I feel like apologizing for having been so blunt in some of my questions and comments about your testimony. We all realize that the Corps personnel, including you, sir, are dedicated to your work and dedicated to our country and you are being prevented from saying what you really think here today about some of these things and we are being denied your expertise in the preparation of this budget which is important for the country and the lives of people and their homes and churches and businesses.

I just think that is inexplicable, to me, why the administration, why the White House would want to do that. Thank you, Mr. Chairman.

Mr. MYERS. Mr. Frelinghuysen.

ADDITIONAL QUESTIONS

Mr. FRELINGHUYSEN. Thank you, Mr. Chairman. Mr. Chairman, I have four questions that relate to the issue of private sector dredging. That is private sector perhaps being able to do some of these dredging projects at a lesser cost. I would like to submit those, if I possibly could, and get responses from the Army Corps, if that is agreeable.

Mr. MYERS. All Members may add questions for the record, if you would like.

CONGRESSMAN PALLONE QUESTIONS

Mr. FRELINGHUYSEN. If I could also indulge you, Congressman Pallone has three questions that he has raised as well that have a bearing on some of our comments and questions today. I would like to, if possible, to include those in the record.

Mr. MYERS. Without objection.

Mr. FRELINGHUYSEN. Thank you very much.

[The information follows:]

CORPS MINIMUM DREDGE FLEET

Mr. FRELINGHUYSEN. Even if there are some flaws in the studies distributed by the Corps during October 1991, has there been any documentation or indication that the private dredging firms have not responded over an extended period at reasonable costs in a timely manner to the nationwide dredging requirements, including emergencies, as provided in P.L. 95-269?

Dr. ZIRSCHKY. Overall, industry has responded to the Corps dredging needs. There are instances when it has taken both private industry and Corps dredges to respond to an emergency. An example was just last year when six dredges were required in the lower Mississippi River to maintain navigation. I do not think industry alone could have responded to the emergency dredging.

HIGHLY SPECIALIZED EQUIPMENT

Mr. FRELINGHUYSEN. Are there any other construction activities under the Corps' responsibilities, other than the dredging program, in which you direct the usage of highly expensive and specialized government owned equipment such as seagoing hopper dredges on a largescale and continuing basis?

Dr. ZIRSCHKY. Along the lower Mississippi River, the Corps uses specialized mat-laying and transporting equipment to increase the flood-carrying capacity of the river channel and reduce flood heights, to stabilize alignment and prevent bank caving that would destroy the main-line levees, and to provide a suitably aligned navigation channel during periods of low flow. As the revetment construction program nears completion, a significant decrease in revetment workload is projected in the future that can justify independent mat-laying crews by the Corps Memphis and Vicksburg District's. Efficiency and cost savings were achieved in the revetment construction program by consolidating the two-sinking-plant operations into one sinking-plant-operation. In addition, a significant amount of equipment and floating plant was retired.

DREDGE OPERATION AND REPAIR COSTS

Mr. FRELINGHUYSEN. Isn't it correct that there are numerous legislative actions and regulations in existence, including the voluminous Federal Acquisition Regulation, which provide a myriad of safeguards to ensure that the private sector fully complies with provisions of the plans and specifications?

Dr. ZIRSCHKY. There are such regulations, but effective oversight is needed to ensure they are followed. Our oversight needs improvement and we are working on this.

Mr. FRELINGHUYSEN. What is the total annual expenditure associated with the operation, maintenance and repair of the four seagoing government-owned hopper dredges?

Dr. ZIRSCHKY. Approximately $51 million is spent annually to operate, maintain and perform shipyard repairs to the four seagoing hopper dredges.

QUESTIONS SUBMITTED BY CONGRESSMAN PALLONE

NATIONAL SIGNIFICANCE

Question. Under its own guidelines, the Army Corps of Engineers is already supposed to consider the "national benefit" of each project it undertakes. What will now constitute "national benefit"?

Answer. The "national benefit" to which you refer relates to the economic analysis required for all water resources projects according to procedures set forth in the Water Resource Council's Economic and Environmental Principles and Guidelines for Water and Related Land Resources adopted February 3, 1983. Even though "national benefits", as defined under the Principles and Guidelines, will be calculated in the same way, as in the past, under the new policy we intend not to budget for projects that do not meet the new criteria for national significance.

Question. Must a project span more than one state to be significant?

Answer. The proposed policy for Corps involvement in future flood control projects has as its first and overriding component that the majority of the flood waters must come from outside the state where the flood damage occurs. The project itself can be in a single state.

Question. What other criteria must A project meet to be considered "significant"?

Answer. The additional criteria are 1) that the benefit to cost ratio be at least 2.0 to 1, and 2) the local sponsor is able and willing to provide 75% of the project's costs.

Question. What effect will this have on ongoing projects, especially those that are at an early phase?

Answer. The proposed policy is to be applied to new phases of work. Projects that are under construction will be completed. Flood control projects in the planning phases will not proceed to the next phase unless the three conditions for Corps involvement are met.

COST EFFECTIVENESS

Question. The President's budget estimates that significant financial savings will result from redefining the Corps' role in recreational water and shore protection projects. Have the loss of millions of recreation and tourism dollars to small businesses and state and local governments, not to mention the effects on small construction firms contracted by the Corps, been considered?

Answer. The policy proposed in the budget does not say that such projects should not be built. The policy rather states that these projects are as or more effectively be accomplished by state or local government. Therefore the only financial impact will be the loss of what has been the Federal share of project costs.

Question. The Army Corps of Engineers is currently our nation's repository of contracting, engineering, and construction experience and infrastructure knowledge. Would not the costs of transferring this expertise to the states, resulting delays, and potential damage incurred during this transition offset any potential savings?

Answer. In recognition that valuable experience and expertise of the Corps needs to be made available to state and local governments, the budget includes the full authorized amounts for the Planning Assistance to States and Tribes and Flood Plain Management Services programs. In addition Corps expertise will continue to be available on a reimbursable basis.

QUESTION FOR THE RECORD FROM CONGRESSMAN PALLONE.

NATIONAL DREDGING PROGRAM

Question. The Army Corps of Engineers is now promoting a "multi-media" approach to dredged material management, yet the only disposal method now receiving Federal financial support is open ocean disposal. What financial role will the Federal government be taking in the future with respect to upland and confined disposal options and what will be the source of the Federal funding?

Answer. The Corps, for years, has been using disposal options such as beneficial uses of dredged material, open water disposal, in-water capping, upland disposal, confined disposal, and near shore disposal. However, since open water disposal costs are borne by the Federal government, while upland and confined disposal costs are usually non-Federal, this creates a strong economic incentive for a non-Federal sponsor to support open water disposal. This is a problem we are continuing to address.

MINIMUM DREDGE FLEET

Mr. MYERS. Following up on Mr. Frelinghuysen, Mr. Secretary, back last fall I think it was that you put out a press release on the dredges that you have that you are going to modernize them, I think something like $20 million. In light of what Mr. Frelinghuysen is saying, if the job is something that the private sector can do, is it worth putting $20 million in modernizing or at least upgrading your Corps fleet? Do you really need them that badly?

Mr. ZIRSCHKY. Yes, sir, we believe it is worth the investment. It is our intention to follow the law and where we can provide work for the private sector to do so, we have decided to permanently downsize our program by the 7-and-a-half million cubic yards. We propose to spend about $12 million.

Regardless of what we do with it, we would intend if we didn't use it full time to put it in the reserve fleet, and it would still need some of this work to go into our reserve fleet for emergency situations so it could pass its Coast Guard certification.

Our studies did not show there is sufficient certainty that the private sector can do the work year round. For most months of the year they can, and we are trying to take a look at how we use our dredges to more cost-effectively use them.

Mr. MYERS. For the record, following on what Mr. Frelinghuysen is asking, you might show what percentage of the dredging was done by the private sector and what percentage by the Corps. Can you provide those?

Mr. ZIRSCHKY. Yes, we can do that for the record.

[The information follows:]

DREDGING PERFORMED BY INDUSTRY AND THE CORPS

Industry accomplishes approximately 80 percent of the dredging and the Corps accomplishes 20 percent.

PROJECTS NOT CONTINUED

Mr. MYERS. Mr. Chief, of the projects which you are going to continue this year, how many are you not continuing on funding, did you drop because of the new criteria? Put that in the record.

General WILLIAMS. We will put that in the record. I don't have those figures.

[The information follows:]

STUDIES AND PROJECTS DELETED FROM BUDGET REQUEST

The process of applying the new policy involved a universe of some 350 General Investigations studies and projects that were being considered for inclusion in the fiscal year 1996 budget. When the criteria were applied to this universe, 89 studies and projects were identified as candidates that might be cut. Seventy-one studies and projects were cut and 18 were reduced to a budget request amount that would allow for the completion of the ongoing phase of work. In the case of Construction, General the universe was 18 new start candidates of which 9 were cut from the budget request entirely. Also, the Aquatic Plant Control program was not included in the budget request.

LISTING OF STUDIES AND PROJECTS CUT FROM BUDGET REQUEST AS A RESULT OF THE NEW POLICY

Construction, General:

Lower Sacramento Area levee Reconstruction, CA
Mid-Valley Levee Reconstruction, CA
San Diego River and Mission Bay, CA
Roughans Point, Revere, MA
Marshall, MN
Holes Creek, West Carroltan, OH
Shoal Creek, Austin, TX
Virginia Beach, VA (Hurricane Protection)
Portage, WI

Aquatic Plant Control Program

General Investigations information follows:

GENERAL INVESTIGATIONS
STUDIES AND PROJECTS CUT FROM FY 1996
BUDGET REQUEST

ANIAK, AK

ARKANSAS RIVER, TUCKER CREEK, AR
SOUTHWEST ARKANSAS STUDY, AR

CITY OF HUNTINGTON BEACH, ORANGE COUNTY, CA
KAWEAH RIVER, CA
NAPA RIVER, SALT MARSH RESTORATION, CA
NORTHERN LOS ANGELES COUNTY, CA
PENINSULA BEACH, CA
RUSSIAN RIVER, ENVIRONMENTAL RESTORATION, CA
SACRAMENTO – SAN JOAQUIN DELTA, WESTERN DELTA ISLANDS, CA
SAN CLEMENTE CREEK, CA
SAN FRANCISCO COUNTY, OCEAN BEACH, CA
SAN JOAQUIN RIVER BASIN, FIREBAUGH AND MENDOTA, CA
SAN JOAQUIN RIVER BASIN, TULE RIVER, CA
SILVER STRAND SHORELINE, CORONADO, CA
UPPER PENITENCIA CREEK, CA
VENTURA AND SANTA BARBARA COUNTY SHORELINE, CA

MANITOU SPRINGS, CO
OAK CREEK, FLORENCE, CO

EAST CENTRAL CONN COASTAL FLOODING, CT

COAST OF FLORIDA EROSION & STORM PROTECTION, FL

FLINT RIVER BASIN STUDY, GA

COASTAL FLOOD STUDY, GU

LITTLE WOOD RIVER, ID (VICINITY OF GOODING AND SHOSHONE), ID

BREVOORT LEVEE, IN
POGUES RUN, INDIANAPOLIS, IN
UPPER TIPPECANOE RIVER BASIN, IN

LEXINGTON, FAYETTE COUNTY, KY

WEST SHORE – LAKE PONTCHARTRAIN, LA

HUMAROCK BEACH, SCITUATE, MA

LAKE ERIE STORM DAMAGE RED, FRENCHTOWN CHARTER TWP, MI

BLUE EARTH RIVER, MN– –MINNESOTA RIVER VALLEY, MN

GENERAL INVESTIGATIONS
STUDIES AND PROJECTS CUT FROM FY 1996
BUDGET REQUEST
(CONTINUED)

JACKSON METROPOLITAN AREA, MS

BARNEGAT INLET TO LITTLE EGG INLET, NJ

ESPANOLA VALLEY, RIO GRANDE & TRIBUTARIES, NM

LOWER TRUCKEE RIVER, NV
TRUCKEE MEADOWS RENO NV

ADDISON, NY
SAW MILL RIVER AT ELMSFORD AND GREENBURGH, NY

BLACKLICK CREEK, OH
MAHONING RIVER BASIN, OH
MUSKINGUM RIVER, KILLBUCK, OH

BIRD CREEK BASIN, OK

SCHULKILL RIVER BASIN, SCHUYLKILL HAVEN AREA, PA

RIO BAYAMON AT BAYAMON, PR
RIO GRANDE DE MANATI, BARCELONETA, PR
RIO GUANAJIBO, PR
RIO NIGUA AT ARROYO, PR
RIO NIGUA AT SALINAS, PR

COASTAL RHODE ISLAND, RI

CHARLESTON STORM DAMAGE REDUCTION, SC

PENNINGTON COUNTY & VICINTY, SD

WHITES CREEK, DAVIDSON CO, TN
WOLF RIVER, MEMPHIS, TN (MR&T)

ALPINE, TX
BUFFALO BAYOU & TRIBS, TX
GALVESTON BEACH EROSION, TX
GRAHAM, TX (BRAZOS RIVER BASIN)
GUADALUPE AND SAN ANTONIO RIVERS, TX
LOWER BRAZOS RIVER, TX
MIDDLE BRAZOS RIVER, TX
NORTHWEST EL PASO, TX
RAYMONDVILLE DRAIN, TX
WALLER CREEK, AUSTIN, TX

GENERAL INVESTIGATIONS
STUDIES AND PROJECTS CUT FROM FY 1996 BUDGET REQUEST
(CONTINUED)

PROVO AND VICINITY, UT

CHESAPEAKE BAY SHORELINE, HAMPTON, VA
POQUOSON, VA
WILLOUGHBY SPIT AND VICINITY, NORFOLK, VA

OMPOMPANOOSUC RIVER, VT

COASTAL STORM DAMAGE EROSION, WA

OCEANA, WV

TRUST FUND AND USER FEES

Mr. MYERS. If you can identify. I guess, Don, this may be along your line. Of the $3.3 billion you are requesting, there is $579 million I believe is going to be from trust funds and user fees. Last year of the $3.4 billion, how much was trust fund and user fees?

Mr. CLUFF. I will have to provide that.

Mr. MYERS. Provide that for the record.

Mr. CLUFF. Yes, sir.

[The information follows:]

Of our budget request for FY95, $580 million was requested from trust funds, special recreation user fees, and proposed use permit fees.

ADDITIONAL QUESTIONS

Mr. MYERS. Okay. Because we are not—increasing the national debt is a concern to all of us, but using user fees is going to reduce what we are appropriating. We are appropriating not only from tax dollars, but from trust accounts, so we would like to have that for the record, if you would.

Okay, Mr. Bilbray of California has some questions for the record also, and I think each of us has some questions that we will provide for the record.

[The information follows:}

NATIONAL SIGNIFICANCE

Mr. Myers. The President's Fiscal Year 1996 budget request proposes that the Corps of engineers refocus its efforts to projects and programs of "national significance." Would you please define "national significance" as it relates to the various Corps of Engineers missions?

Dr. Zirschky. Mr. Chairman, the budget that we have submitted proposes that the Corps of Engineers focus its efforts on projects and programs of broad national scope and significance, including commercial harbors and inland navigation, emergency response, integrated multi-state flood control projects such as some on the Mississippi River , flood control projects involving interstate waters, and flood control and other research and development.

Mr. Myers. Is this new policy based only on a desire to reduce spending or does it stem from a belief that many of the past activities of the Corps, particularly in the area of flood control, have not been beneficial to the nation?

Dr. Zirschky. Mr. Chairman, the many past accomplishments of the Corps of Engineers should continue to be celebrated by this Nation. The flood control works constructed by the Corps have prevented many billions of dollars in damages and saved untold lives. These works will continue to serve the Nation for many years into the future. However, in order to reduce the deficit savings must be achieved in Federal programs and this requires hard choices. We were essentially in a situation where we had to chose one of two possible courses of action. One, we could take reductions across the board and thereby reduce our capability in all areas of the Corps mission or, two we could identify those parts of the mission that could be left to the states or local government. We believe that it is better to do well a smaller mission than to partially do a larger one.

ACTIONS IN ABSENCE OF ACTION BY CONGRESS

Mr. Myers. Understanding that we will have to deal with severe budgetary constraints for the next several years, how will you proceed with projects if your proposed policy changes, the change in cost sharing for flood control, for example, are not adopted by the Congress?

Dr. Zirschky. Mr. Chairman, our proposal deals only with projects that have not yet been funded for construction and accordingly, in the absence of action by the Congress on changing the cost sharing for nationally significant flood control projects, we propose to complete the current phase, but we would not move them to the next phase or initiate construction on such projects.

CRITERIA FOR FLOOD CONTROL

Mr. Myers. It appears to us that the new criteria that would be applied against flood control projects are so restrictive that the practical effect would be to end the Corps of Engineers involvement in flood control activities. Is that a fair assessment and is that the intent of this new policy?

Dr. Zirschky. Mr. Chairman, the intent of the policy is to allow local projects to be undertaken by the lowest level of government that is capable of undertaking the project. The policy provides for Federal involvement on those projects that involve primarily interstate flood waters and a substantial economic return on the investment. As a practical matter, I would envision that the Corps would be involved in only a limited number of projects in the future.

APPLICATION TO ONGOING WORK

Mr. Myers. How will these new policies be applied to ongoing projects?

Dr. Zirschky. Mr. Chairman, projects that have been funded for construction will not be affected by these new policies.

SPONSOR NOTIFICATION

Mr. Myers. Have you set up a process for notifying local project sponsors of these proposed policy changes so they can assess whether or not they want to continue to participate in Corps of Engineers projects that will be affected?

Dr. Zirschky. Mr. Chairman, at this time we have not established a formal notification system. However, since the local sponsors that are most directly affected are those who have cost shared or are cost sharing in a feasibility study, we will send each of these local sponsors notification.

PHASE IN OF POLICY

Mr. Myers. We understand that these new policies will be phased in over a period of years. Please explain how that will work.

Dr. Zirschky. Mr. Chairman, ongoing studies and projects will be continued to the completion of whatever phase they are in at the end of FY 95 and the next phase would be undertaken only on those projects which comply with the new policy. Specifically, reconnaissance studies underway will be completed and the feasibility undertaken if the reconnaissance study concludes that there is a project that meets the nationally significant tests and the local sponsor wishes to proceed with the feasibility study. Similarly, when feasibility studies conclude, they would proceed to preconstruction engineering and design under the terms of the new policy. Ongoing preconstruction engineering and design will be completed, but only nationally significant projects will be budgeted for initiation of construction.

BUDGET SAVINGS

Mr. MYERS. The budget states that implementation of this new policy will save $16,000,000 in the General Investigations account and $13,000,000 in the Construction, General account in fiscal year 1996. How were those figures derived? Please provide for the record a list of the projects that make up those projected savings.

Dr. ZIRSCHKY. The figure of $16.0 million savings by implementing this new policy in the General Investigations account was derived as follows: the gross reduction amounted to $23.2 million, after application of an appropriate amount for savings and slippage, $7.2 million, the net savings for fiscal year 1996 would be $16.0 million.

The savings for the Construction, General program was derived from a gross amount of $15.7 million for 9 projects and the Aquatic Plant Control program, this gross was reduced by $2.7 million after application of an appropriate for savings and slippage to a net amount of $13.0 million.

Lists of the studies and projects that make up the projected savings are provided for the record.

(The information follows:)

CONSTRUCTION, GENERAL PROJECTS AND PROGRAM CONSIDERED FOR INCLUSION IN THE CORPS PROGRAM WHICH WERE IMPACTED BY THE NEW POLICY

Lower Sacramento Area Levee Reconstruction, CA
Mid-Valley Levee Reconstruction, CA
San Diego River and Mission Bay, CA
Roughans Point, Revere, MA
Marshall, MN
Holes Creek, West Carroltan, OH
Shoal Creek, Austin, TX
Virginia Beach, VA (Hurricane Protection)
Portage, WI

Aquatic Plant Control Program

General Investigations information follows:

GENERAL INVESTIGATIONS
STUDIES AND PROJECTS CONSIDERED FOR INCLUSION IN FY 1996 CORPS PROGRAM WHICH WERE IMPACTED BY THE NEW POLICY

ANIAK, AK

ARKANSAS RIVER, TUCKER CREEK, AR
SOUTHWEST ARKANSAS STUDY, AR

GILA RIVER & TRIBUTARIES, N SCOTTSDALE DRAINAGE AREA, AZ
GILA RIVER, TORTOLITA DRAINAGE AREA, AZ

CITY OF ENCINITAS, CA
CITY OF HUNTINGTON BEACH, ORANGE COUNTY, CA
KAWEAH RIVER, CA
N CA STREAMS, CACHE CREEK ENVIRONMENTAL RESTORATION, CA
NAPA RIVER, SALT MARSH RESTORATION, CA
NORTHERN LOS ANGELES COUNTY, CA
PENINSULA BEACH, CA
RUSSIAN RIVER, ENVIRONMENTAL RESTORATION, CA
SACRAMENTO – SAN JOAQUIN DELTA, LITTLE HOLLAND TRACT, CA
SACRAMENTO – SAN JOAQUIN DELTA, WESTERN DELTA ISLANDS, CA
SAN ANTONIO CREEK, CA
SAN CLEMENTE CREEK, CA
SAN FRANCISCO COUNTY, OCEAN BEACH, CA
SAN JOAQUIN RIVER BASIN, FIREBAUGH AND MENDOTA, CA
SAN JOAQUIN RIVER BASIN, TULE RIVER, CA
SANTA BARBARA COUNTY STREAMS, CA
SILVER STRAND SHORELINE, CORONADO, CA
UPPER PENITENCIA CREEK, CA
VENTURA AND SANTA BARBARA COUNTY SHORELINE, CA

MANITOU SPRINGS, CO
OAK CREEK, FLORENCE, CO

EAST CENTRAL CONN COASTAL FLOODING, CT

COAST OF FLORIDA EROSION & STORM PROTECTION, FL

FLINT RIVER BASIN STUDY, GA

COASTAL FLOOD STUDY, GU

LITTLE WOOD RIVER, ID (VICINITY OF GOODING AND SHOSHONE), ID

BREVOORT LEVEE, IN
POGUES RUN, INDIANAPOLIS, IN
UPPER TIPPECANOE RIVER BASIN, IN

GENERAL INVESTIGATIONS
STUDIES AND PROJECTS CONSIDERED FOR INCLUSION IN FY 1996 CORPS PROGRAM WHICH WERE IMPACTED BY THE NEW POLICY
(CONTINUED)

LEXINGTON, FAYETTE COUNTY, KY

LAFAYETTE PARISH, LA
WEST SHORE – LAKE PONTCHARTRAIN, LA

HUMAROCK BEACH, SCITUATE, MA

LAKE ERIE STORM DAMAGE RED, FRENCHTOWN CHARTER TWP, MI

BLUE EARTH RIVER, MN– –MINNESOTA RIVER VALLEY, MN

HANCOCK, HARRISON AND JACKSON COUNTIES, MS
JACKSON METROPOLITAN AREA, MS

BARNEGAT INLET TO LITTLE EGG INLET, NJ
SOUTH RIVER, RARITAN RIVER BASIN, NJ

ESPANOLA VALLEY, RIO GRANDE & TRIBUTARIES, NM
ROCKY ARROYO/DARK CANYON, PECOS RIVER AND TRIBUTARIES, NM

LOWER TRUCKEE RIVER, NV
TRUCKEE MEADOWS RENO NV

ADDISON, NY
NORTH SHORE OF LONG ISLAND, NY
SAW MILL RIVER AT ELMSFORD AND GREENBURGH, NY
SOUTH SHORE OF STATEN ISLAND, NY

BLACKLICK CREEK, OH
MAHONING RIVER BASIN, OH
MUSKINGUM RIVER, KILLBUCK, OH

BIRD CREEK BASIN, OK

COLUMBIA SLOUGH, OR

JUNIATA RIVER BASIN, PA
MILTON, PA
SCHYULKILL RIVER BASIN, SCHUYLKILL HAVEN AREA, PA

RIO BAYAMON AT BAYAMON, PR
RIO GRANDE DE MANATI, BARCELONETA, PR
RIO GUANAJIBO, PR
RIO NIGUA AT ARROYO, PR
RIO NIGUA AT SALINAS, PR

GENERAL INVESTIGATIONS
STUDIES AND PROJECTS CONSIDERED FOR INCLUSION IN FY 1996 CORPS PROGRAM WHICH WERE IMPACTED BY THE NEW POLICY
(CONTINUED)

COASTAL RHODE ISLAND, RI

CHARLESTON STORM DAMAGE REDUCTION, SC

PENNINGTON COUNTY & VICINTY, SD

WHITES CREEK, DAVIDSON CO, TN
WOLF RIVER, MEMPHIS, TN (MR&T)

ALPINE, TX
BUFFALO BAYOU & TRIBS, TX
GALVESTON BEACH EROSION, TX
GRAHAM, TX (BRAZOS RIVER BASIN)
GUADALUPE AND SAN ANTONIO RIVERS, TX
LOWER BRAZOS RIVER, TX
MIDDLE BRAZOS RIVER, TX
NORTHWEST EL PASO, TX
PLAINVIEW, BRAZOS RIVER BASIN, TX
RAYMONDVILLE DRAIN, TX
WALLER CREEK, AUSTIN, TX

PROVO AND VICINITY, UT

CHESAPEAKE BAY SHORELINE, HAMPTON, VA
POQUOSON, VA
WILLOUGHBY SPIT AND VICINITY, NORFOLK, VA

OMPOMPANOOSUC RIVER, VT

COASTAL STORM DAMAGE EROSION, WA

CHEAT RIVER BASIN, WV
OCEANA, WV

CONTINUING AUTHORITIES PROGRAM

Mr. MYERS. What impact will this new policy have on the various Continuing Authorities Programs of the Corps of Engineers?

Dr. ZIRSCHKY. Although the program has implemented many hundreds of projects nationwide that are highly valued by their beneficiaries, we cannot describe then as nationally significant. We believe that the problems addressed are of a scope more appropriately addressed at the local level. Therefore, FY 1996 will be the last year of budgeting for the program as we initiate an orderly shutdown. Projects now underway in any phase, or future new studies, which can achieve construction approval prior to the end of FY 1996 will proceed through completion of construction. Any construction funding requirements after FY 1996 will be covered by Continuing Authorities funds carried over at the end of FY 1996 and by reprogramming from other Construction, General line items as needed. Projects now underway which cannot achieve construction approval prior to the end of FY 1996 will be terminated.

STAFFING LEVELS

Mr. MYERS: What impact would this new policy have on your staffing levels between now and the year 2000?

Dr. ZIRSCHKY: It is estimated that the new policy would reduce the Corps staffing levels by approximately 2,582 Full Time Equivalents below our current Streamlining Plan between FY 96 and FY 2000. This would amount to a total reduction of 5,968 FTE or approximately 20 percent below our FY 93 base level of 29,194 FTE.

RENOURISHMENT OF BEACH EROSION CONTROL PROJECTS

Mr. MYERS. How will your new policy affect the renourishment of beach erosion control projects?

Dr. ZIRSCHKY. Beach nourishment will be accomplished on shore protection projects for which construction funds have been previously appropriated by Congress until the expiration date of the renourishment period specified in the project cooperation agreement applicable to the project. This applies to projects with previously executed agreements as well as to projects previously funded for construction for which agreements are currently programmed. However, as the renourishment period expires for each shore protection project, the project cooperation agreement will not be extended under the provisions of Section 934 of the WRDA 1986, which allows extension of the renourishment period for up to 50 years.

NEW POLICIES - HARBORS

Mr. MYERS. For the purposes of this new policy, how are you going to define "recreational harbor?" Please provide for the record a list of projects which you do not consider to be recreational.

Dr. ZIRSCHKY. We propose to focus on maintaining commercial harbors of broad national scope. Candidates for divestiture would be those harbors that handle little or no commercial traffic and, therefore, provide primarily recreational benefits. This would involve working with appropriate local authorities to turn over the maintenance of harbors that are not expected to yield revenues to the Harbor Maintenance Trust Fund (HMTF). I will provide for the record a list of deep draft projects with commercial traffic. Of these projects, 236 are currently subject to the ad valorem fee and, consequently, would be expected to contribute to the Harbor Maintenance Trust Fund. The remaining projects on the list with an asterisk (*) are not currently subject to the fee because no expenditures had been made to maintain them in the ten years preceding enactment of WRDA 1986. However, with more recent expenditures, some of them could be added to the list furnished to Customs for collection of fees. Some deep draft harbors are not included because there is no commercial traffic in the harbor and, therefore, no contributions to the HMTF are generated; these are among the candidates for divestiture. Since the ad valorem fee is not paid to Customs on a port or project specific basis only an estimate of potential port or project related HMTF revenues can be made. Accordingly, the list is subject to change and will be amended as new data become available.

(The information follows:)

CORPS OF ENGINEERS -- CIVIL

DEEP DRAFT HARBORS WITH COMMERCIAL TRAFFIC

(Subject to revision as new data become available)

TABLE PAGE 1

State	Project
AL	MOBILE HARBOR AL
AK	ANCHORAGE HARBOR AK
AK	HAINES HARBOR AK
AK	HOMER HARBOR AK
AK	HOONAH HARBOR AK
AK	HUMBOLDT HARBOR AK
AK	ILIULIUK HARBOR AK
AK	KETCHIKAN HARBOR AK
AK	KING COVE HARBOR AK
AK	KODIAK HARBOR AK
AK	METLAKATLA HARBOR AK
AK	PETERSBURG HARBOR AK
AK	SELDOVIA HARBOR AK
AK	SERGIUS-WHITESTONE NARROWS AK
AK	SEWARD HARBOR, AK *
AK	SITKA HARBOR AK
AK	SKAGWAY HARBOR AK *
AK	ST GEORGE HARBOR *
AK	WRANGELL NARROWS AK
AS	OFU HARBOR SAMOA *
CA	CHANNEL ISLANDS HARBOR
CA	CRESCENT CITY HARBOR CA
CA	DANA POINT HARBOR CA *
CA	HUMBOLDT HARBOR BAY
CA	LOS ANGELES AND LONG BEACH HARBOR CA
CA	MARINA DEL REY CA *
CA	MORRO BAY HARBOR CA
CA	MOSS LANDING HARBOR CA*
CA	NAPA RIVER CA
CA	NEWPORT HARBOR CA *
CA	OAKLAND HARBOR CA
CA	OCEANSIDE HARBOR CA
CA	PORT HUENEME CA
CA	REDWOOD CITY HARBOR CA
CA	RICHMOND HARBOR CA
CA	SACRAMENTO RIVER CA
CA	SAN DIEGO HARBOR CA
CA	SAN DIEGO-MISSION BAY *
CA	SAN FRANCISCO HARBOR CA
CA	SAN JOAQUIN RIVER CA
CA	SAN PABLO BAY & MARE ISLAND STRAIT CA
CA	SANTA BARBARA HARBOR
CA	SANTA CRUZ CA *
CA	SUISUN BAY CHANNEL CA
CA	VENTURA HARBOR CA
CT	BLACK ROCK HARBOR BRDGPORT CT
CT	BRIDGEPORT HARBOR CT
CT	CONNECTICUT RIVER BELOW HARTFRD, CT
CT	DUCK ISLAND HARBOR CT
CT	HOUSATONIC RIVER CT
CT	MYSTIC HARBOR CT *
CT	NEW HAVEN HARBOR CT
CT	NEW LONDON HARBOR CT
CT	STAMFORD HARBOR CT
CT	THAMES RIVER CT *
CT	WILSON POINT CT
DE	DELAWARE BAY HARBOR OF REFUGE
DE	DELAWARE RIVER PHILADELPHIA TO THE SEA PA & NJ
DE	INLAND WATERWAY FROM DELAWARE BAY RIVER TO CHESAPEAKE BAY
DE	WILMINGTON HARBOR DEL
DC	WASHINGTON HARBOR DC
FL	CANAVERAL HARBOR FL
FL	CARRABELLE HARBOR FL

CORPS OF ENGINEERS -- CIVIL

DEEP DRAFT HARBORS WITH COMMERCIAL TRAFFIC

(Subject to revision as new data become available)

TABLE PAGE 2

State	Project
FL	CHARLOTTE HARBOR FL
FL	FERNANDINA HARBOR FL
FL	FORT PIERCE HARBOR FL
FL	JACKSONVILLE HARBOR FL
FL	KEY WEST HARBOR FL
FL	MANATEE HARBOR
FL	MIAMI HARBOR FL
FL	MIAMI RIVER
FL	PALM BEACH HARBOR FL
FL	PANAMA CITY HARBOR FL
FL	PENSACOLA HARBOR FL
FL	PORT EVERGLADES HARBOR
FL	PT ST. JOE HARBOR FL
FL	ST. PETERSBURG HARBOR FL
FL	TAMPA HARBOR ALAFIA RIVER
FL	TAMPA HARBOR EAST BAY CHANNEL
FL	TAMPA HARBOR FL
GA	BRUNSWICK HARBOR
GA	SAVANNAH HARBOR
GA	ST. MARYS RIVER GA-FL
HI	BARBERS POINT HARBOR , HI
HI	HILO HARBOR HI
HI	HONOLULU HARBOR HI
HI	KAHULUI HARBOR HI
HI	KAUNAKAKAI HARBOR HI
HI	KAWAIHAE HARBOR HI
HI	NAWILIWILI HARBOR HI
HI	PORT ALLEN HARBOR HI
IL	CALUMET HARBOR IL
IL	CHICAGO HARBOR IL
IL	CHICAGO RIVER IL
IL	WAUKEGAN HARBOR IL
IN	BURNS WATERWAY HARBOR
IN	INDIANA HARBOR IN
IN	MICHIGAN CTY HARBOR IN
LA	ATCHAFALAYA RIVER AND BAYOUS CHENE, BOEF AND BLACK LA
LA	CALCASIEU RIVER PASS LA
LA	HOUMA NAV CANAL LA
LA	MICHOUD CANAL
LA	MISSISSIPPI RIVER-BATON ROUGE TO GULF LA
LA	MISSISSIPPI RIVER-GULF OUTLET LA
ME	BELFAST HARBOR ME *
ME	BUCKSPORT HARBOR ME
ME	CAPE PORPOISE ME *
ME	CARVERS HARBOR ME *
ME	DEER ISLAND THRGHFARE *
ME	GEORGES RIVER ME *
ME	KENNEBEC RIVER ME
ME	PENOBSCOT HARBOR ME
ME	PORTLAND HARBOR ME
ME	ROCKLAND HARBOR ME *
ME	SEARSPORT HARBOR ME *
ME	STOCKTON HARBOR ME *
ME	TENNANTS HARBOR ME *
MD	ANNAPOLIS HARBOR MD
MD	BALT HARBOR CHS MD & VA
MD	CAMBRIDGE HARBOR MD
MD	POTOMAC RIVER BELOW WASHINGTON DC
MD	SUSQUEHANNA RIVER ABOVE AND BELOW HAVRE DE GRACE
MA	BEVERLY HARBOR MA *
MA	BOSTON HARBOR MA
MA	CAPE COD CANAL MA *
MA	CHELSEA RIVER MA

CORPS OF ENGINEERS -- CIVIL

DEEP DRAFT HARBORS WITH COMMERCIAL TRAFFIC

(Subject to revision as new data become available)

TABLE PAGE 3

State	Project
MA	CROSSRIP SHOALS NANTUCKET SOUND MA *
MA	DORCHESTER BAY MA
MA	EDGARTOWN HARBOR MA *
MA	FALL RIVER HARBOR MA
MA	GLOUCHESTER HARBOR & ANNIS RIVER MA
MA	LYNN HARBOR MA *
MA	MYSTIC RIVER MA
MA	NANTUCKET HARBOR OF REFUGE MA *
MA	NEW BEDFORD AND FAIRHAVEN MA *
MA	PLYMOUTH HARBOR MA *
MA	POLLOCK RIP SHOALS NANTUCKET SOUND MA *
MA	ROCKPORT HARBOR MA *
MA	SALEM HARBOR MA *
MA	VINEYARD HAVEN HARBOR*
MA	WEYMOUTH BACK R MA
MA	WEYMOUTH-FORE AND TOWN RIVER HARBOR MA
MI	ALPENA HARBOR MI
MI	BLACK RIVER (PORT HURON)
MI	CHANNELS IN LAKE ST CLAIR
MI	CHANNELS IN STRAITS OF MACKINAC MI *
MI	CHARLEVOIX HARBOR MI
MI	CHEYBOYGAN HARBOR MI
MI	DETROIT RIVER MI
MI	FRANKFORT HARBOR MI
MI	GRAND HAVEN HARBOR MI
MI	GRAND MARAIS HARBOR MI
MI	GRAYS REEF MI *
MI	HARBOR BEACH HARBOR MI
MI	HOLLAND HARBOR MI
MI	KEWEENAW WATERWAY MI
MI	LITTLE BAY DE NOC, GLADSTONE HARBOR & KIPLING MI
MI	LUDINGTON HARBOR MI
MI	MANISTEE HARBOR MI
MI	MANISTIQUE HARBOR MI *
MI	MARQUETTE HARBOR MI
MI	MENOMINEE HARBOR MI
MI	MONROE HARBOR MI
MI	MUSKEGON HARBOR MI
MI	ONTONAGON HARBOR MI
MI	PENTWATER HARBOR MI
MI	PORTAGE LAKE HARBOR MI*
MI	PRESQUE ISLE HARBOR MI
MI	ROTA HARBOR CNMI *
MI	ROUGE RIVER MI
MI	SAGINAW RIVER MI
MI	SOUTH HAVEN HARBOR MI
MI	ST CLAIR RIVER MI
MI	ST JOSEPH HARBOR MI
MI	ST MARYS RIVER MI
MI	WHITE LAKE HARBOR MI
MN	DULUTH-SUPERIOR MN
MN	GRAND MARAIS HARBOR MN
MN	TWO HARBORS MN
MS	GULFPORT HARBOR MS
MS	PASCAGOULA HARBOR MS
NH	PORTSMOUTH HARBOR ME
NJ	ABSECON INLET NJ
NJ	COLD SPRNG INLET
NJ	DELAWARE RIVER AT CAMDEN
NJ	MANTUA CREEK NJ
NJ	NEW YORK NEW JERSEY CHANNELS NY & NJ

CORPS OF ENGINEERS -- CIVIL

DEEP DRAFT HARBORS WITH COMMERCIAL TRAFFIC

(Subject to revision as new data become available)

TABLE PAGE 4

State	Project
NJ	NEWARK BAY HACKENSAK AND PASSAIC RIVERS NJ
NJ	RARITAN RIVER NJ
NJ	SALEM RIVER NJ *
NY	BAY RIDGE RED HOOK CHANNEL NY
NY	BUFFALO HARBOR NY
NY	BUTTERMILK CHANNEL NY
NY	CAPE VINCENT HARBOR NY
NY	CONEY ISLAND CHANNEL NY
NY	DUNKIRK HARBOR NY
NY	EAST RIVER NY
NY	FLUSHING BAY CREEK NY
NY	GOWANUS CREEK CHANNEL
NY	GREAT SODUS BAY HARBOR
NY	HARLEM RIVER, NY
NY	HUDSON RIVER NY TO WATERFORD CT
NY	HUDSON R. CHANNEL, NY
NY	JAMAICA BAY NY
NY	NEW YORK HARBOR NY
NY	NEWTOWN CREEK NY
NY	OGDENSBURG HARBOR NY
NY	OSWEGO HARBOR NY
NY	PORT JEFFERSON HARBOR
NY	ROCHESTER HARBOR NY
NY	WALLABOUT CHANNEL NY
NC	BEAUFORT HARBOR NC
NC	CAPE FEAR RIVER ABOVE WILMINGTON NC
NC	MOREHEAD CITY HARBOR
NC	WILMINGTON NC
OH	ASHTABULA HARBOR OH
OH	CLEVELAND HARBOR OH
OH	CONNEAUT HARBOR OH
OH	FAIRPORT HARBOR OH
OH	HURON HARBOR OH
OH	LORAIN HARBOR OH
OH	SANDUSKY HARBOR OH
OH	TOLEDO HARBOR OH
OR	COLUMBIA LOWER WILLAMETTE RIVER OR
OR	COLUMBIA RIVER AT THE MOUTH OR & WA
OR	COLUMBIA RIVER BETWEEN VANCOUVER AND THE DALLES
OR	COOS BAY OR
OR	MUTTNOMAH CHANNEL OR
OR	OREGON SLOUGH, OR
OR	PORT ORFORD OR
OR	SIUSLAW RIVER OR
OR	SKIPANON CHANNEL OR
OR	TILLAMOOK BAY BAR OR
OR	UMPQUA RIVER OR
OR	YAQUINA BAY HARBOR OR
PA	DELAWARE RIVER PHILADELPHIA TO TRENTON
PA	ERIE HARBOR PA *
PA	SCHUYLKILL RIVER PA
PR	ARECIBO HARBOR PR
PR	MAYAGUEZ HARBOR PR
PR	PONCE HARBOR PR
PR	SAN JUAN HARBOR PR
RI	BLOCK ISLAND HARBOR OF REF RI *
RI	GREAT SALT POND RI *
RI	NEWPORT HARBOR RI *
RI	PROVIDENCE RIVER AND HARBOR RI *
RI	PT JUDTH POND AND HARBOR OF REFUGE RI *
RI	SAKONNET HARBOR RI *

CORPS OF ENGINEERS -- CIVIL

DEEP DRAFT HARBORS WITH COMMERCIAL TRAFFIC

(Subject to revision as new data become available)

TABLE PAGE 5

State	Project
RI	SEEKONK RIVER RI *
SC	ASHLEY RIVER SC
SC	CHARLESTON HARBOR SC
SC	GEORGETOWN HARBOR SC
SC	PORT ROYAL HARBOR SC
TX	BRAZOS ISLAND HARBOR TX
TX	CORPUS CHRISTI SHIP CHANNEL TX
TX	FREEPORT HARBOR TX
TX	GALVESTON HARBOR CH TX
TX	GREENS BAYOU CHANNEL
TX	HOUSTON SHIP CHANNEL
TX	MATAGORDA SHIP CHANNEL
TX	SABINE-NECHES WATERWAY
TX	TEXAS CITY SHIP CHANNEL
VI	CHRISTIANSTED HARBOR ST CROIX*
VA	CAPE CHARLES CITY HARBOR
VA	CHANNEL TO NEWPORT NEWS
VA	JAMES RIVER VA
VA	LITTLE RIVER (CREEK) VA
VA	NORFOLK HARBOR AND CHANNELS VA
VA	POTOMAC RIVER AT ALEXANDRIA VA
VA	YORK RIVER VA
WA	ANACORTES HARBOR WA *
WA	BELLINGHAM HARBOR WA
WA	EVERETT HARBOR AND SNOHOMISH RIVER WA
WA	GRAYS HARBOR WA
WA	KENMORE NAVIGATION CH
WA	LAKE CROCKETT WA *
WA	LAKE WASHINGTON SHIP CHANNEL WA
WA	OLYMPIA HARBOR WA
WA	PORT GAMBLE HARBOR WA*
WA	PORT ORCHARD BAY WA *
WA	SEATTLE HARBOR WA
WA	SHILSHOLE BAY WA *
WA	TACOMA HARBOR WA
WA	WATERWAY CONNECTING PORT TOWNSND AND OAK BAY CA *
WA	WILLAPA HARBOR *
WI	ASHLAND HARBOR WI *
WI	GREEN BAY HARBOR WI
WI	KENOSHA HARBOR WI *
WI	KEWAUNEE HARBOR WI *
WI	MANITOWOC HARBOR WI *
WI	MILWAUKEE HARBOR WI
WI	OCONTO HARBOR WI
WI	PORT WASHINGTON HARBOR *
WI	PORT WING HARBOR WI
WI	SHEBOYGAN HARBOR WI
WI	STURGEON BAY HARBOR WI
WI	TWO RIVERS HARBOR WI *

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INLAND WATERWAYS

Mr. MYERS. How will inland harbors be treated under the new policy?

Dr. ZIRSCHKY. Inland harbors will continue to be maintained by the Corps of Engineers.

RECREATION HARBORS

Mr. MYERS. If you are unable to find local interests who are willing to assume maintenance responsibilities for "recreational" harbors, will you budget for them in the future?

Dr. ZIRSCHKY. Mr. Chairman, our proposal is to phase out the Corps role on low use harbor projects, that do not produce contributions to the Harbor Maintenance Trust Fund, beginning in fiscal year 1998, with a complete phase out by fiscal year 2000. Until local interests are able to take over the maintenance of the phased out navigation projects, we will only include funds for those projects in order to advise navigation interests of channel conditions. Dredging and other maintenance requirements will have to be deferred until local interests can assume this responsibility.

ENVIRONMENTAL RESTORATION

Mr. Myers. Based on our review of the budget request, it appears that all environmental restoration activities, no matter how small and localized, have been deemed to be of national significance. Is that the case?

Dr. Zirschky. Mr. Chairman, the environmental restoration projects that we propose to fund are fundamentally in response to environmental degradation caused at least in part by earlier Federal projects, or where modification of an existing Federal project offers the most cost-effective means of restoring the environment. Such restoration has been accorded a high priority in our program. Size and location of the restoration requirement have no bearing on this.

NEW O&M POLICIES - TURNING OVER PROJECTS TO LOCALS

Mr. MYERS. As part of this new policy, we understand that you will attempt to turn over "local" flood control reservoirs to local interests for operation and maintenance. Will you also attempt to transfer title of the facilities to local interests?

Dr. ZIRSCHKY. When projects are turned over to local sponsors, all legal interests and responsibilities will be transferred to the local sponsor.

Mr. MYERS. If you are unable to find local interests willing to assume that responsibility, will you continue to budget for operation and maintenance activities?

Dr. ZIRSCHKY. We will continue to include minimimum funds in the budget so that the projects can be operated and maintained in a safe manner until negotiations can be completed to transfer them to local interests. We are looking into criteria that may be developed in the future to reduce operation and maintenance activities for projects lacking local sponsorship.

Mr. MYERS. Have you had any past success in turning over projects to local interests for operation and maintenance?

Dr. ZIRSCHKY. There is a success and potential with on-going negotiations. Wynoochee Dam which provided primary benefits of flood control and water supply was turned over to the City of Aberdeen, Washington in 1993. At present, further negotiations are finalizing operational details. This process took over seven years of negotiations and two pieces of enabling legislation. Other on-going negotiations include Lower Fox River for navigation in Wisconsin, the Inland Route for recreation navigation in Michigan and Kentucky River locks 5 through 14 in Kentucky. No dates are presently available for projected turn-over of these projects.

FY 1996 MULTI-STATE CONSTRUCTION, GENERAL PROJECTS

Mr. MYERS. Of the projects budgeted for construction in fiscal year 1996, which meet the criteria of being "multi-state" and having a benefit-cost ratio of 2:1 or greater?

Dr.ZIRSCHKY. There are only three budgeted flood control projects which meet the new criteria of being "multi-state" and having a benefit-cost ratio of 2:1 or greater. These are the Abiquiu Dam Emergency Gates, New Mexico, East St. Louis, Illinois, and Souris River Basin, North Dakota, projects.

FY 1996 STUDIES AND PROJECTS THAT WOULD NOT BE CONTINUED

Mr. MYERS. Please provide for the record a list of all projects included in the fiscal year 1996 budget that would not be continued following completion of the current phase of work if these policies are adopted.

Dr. ZIRSCHKY. Yes sir, I will place that list of studies and projects in the record.

(The information follows:)

GENERAL INVESTIGATIONS
STUDIES AND PROJECTS THAT WOULD NOT BE CONTINUED FOLLOWING COMPLETION OF THE CURRENT PHASE OF WORK

LOWER WHITE RIVER (BIG CREEK & TRIBS), AR (MR&T)
MAY BRANCH, FORT SMITH, AR

GILA R & TRIBS, N SCOTTSDALE DRAINAGE AREA, AZ
GILA R, GILLESPIE DAM TO YUMA, AZ
GILA R, TORTOLITA DRAINAGE AREA, AZ
RIO SALADO, SALT RIVER, AZ
TUCSON DRAINAGE AREA, AZ

AMERICAN RIVER WATERSHED, CA
CITY OF ENCINITAS, CA
MALIBU COASTAL AREA, CA
MARIN CTY SHORELINE, SAN CLEMETE CK, CA
N CA STREAMS, WINTERS & VIC., CA
N CA STREAMS, YUBA RIVER BASIN, CA
NAPA RIVER, CA
PAJARO AT WATSONVILLE, CA
SAC – SAN J. DELTA, LT. HOLLAND TRACT, CA
SACRAMENTO – SAN JOAQUIN DELTA, CA
SAN ANTONIO CREEK, CA
SAN DIEGO CNTY, OCEANSIDE & CALSBAD, CA
SAN FRANCISCO COUNTY, OCEAN BEACH. CA
SAN JOAQUIN R BASIN, KAWEAH RIVER, CA
SAN JOAQUIN R BASIN, S SAC CTY STREAMS, CA
SAN JOAQUIN R., CALIENTE CK STREAM GP,CA
SAN J. R., ARROYO PASAJERO (FRESNO CO),CA
SAN LORENZO RIVER, CA
SAN RAFAEL CANAL, CA
SANTA BARBARA COUNTY STREAMS, CA
UPPER GUADALUPE RIVER, CA
WHITEWATER RIVER BASIN, CA

CENTRAL CT COASTAL FLOODING

DE COAST FROM CAPE HENLOPEN TO FENWICK ISD,DE
DELAWARE BAY COASTLINE, DE & NJ

BREVARD COUNTY, FL
DAYTONA BEACH SHORES, FL
PANAMA CITY BEACHES, FL

WAILUPE STREAM FC STUDY, OAHU, HI

GENERAL INVESTIGATIONS STUDIES AND PROJECTS THAT WOULD NOT BE CONTINUED FOLLOWING COMPLETION OF THE CURRENT PHASE OF WORK (CONTINUED)

CHICAGO SHORELINE, IL
FREEPORT, IL
NUTWOOD DRAINAGE & LEVEE DISTRICT, IL
SOUTHEAST CHICAGO, IL

INDIANAPOLIS, WHITE RIVER (NORTH), IN
LITTLE CALUMET RIVER BASIN, CALUMET TWP, IN
LITTLE CALUMET RIVER BASIN, DYER, IN
WABASH R BASIN COMP (MID REACHES),IN

SALINA, KS
WINFIELD, KS

METROPOLITAN LOUISVILLE, POND CREEK, KY
METRO. LOUISVILLE, BEARGRASS CREEK, KY

COMITE RIVER, LA
EAST BATON ROUGE PARISH, LA
JEFFERSON PARISH, LA
LAFEYETTE PARISH, LA
MORGANZA TO THE GULF,HURR PROTECTION,LA(MR&T)
ORLEANS PARISH, LA
WEST BANK – EAST OF HARVEY CANAL, LA

BLUE RIVER BASIN, KANSAS CITY, MO

HANCOCK, HARRISON & JACKSON COUNTYS, MS
MISSISSIPPI DELTA, MS (MR&T)

BRUNSWICK COUNTY BEACHES, NC
DARE COUNTY BEACHES, NC

DEVIL'S LAKE, ND

ANTELOPE CREEK, LINCOLN, NE
WOOD RIVER, GRAND ISLAND, NE

GENERAL INVESTIGATIONS
STUDIES AND PROJECTS THAT WOULD NOT BE CONTINUED FOLLOWING COMPLETION OF THE CURRENT PHASE OF WORK
(CONTINUED)

BRIGANTINE INLET TO GREAT EGG HARBOR INLET, NJ
GREAT EGG INLET TO TOWNSEND INLET, NJ
LOWER SADDLE RIVER, BERGEN COUNTY,NJ
MANASQUAN INLET TO BARNEGAT INLET, NJ
RARITAN BAY & SANDY HOOK BAY (CLIFFWOOD BH),NJ
RARITAN BAY & SANDY HOOK BAY, NJ
RARITAN RIVER BASIN, GREEN BROOK SUB–BASIN, NJ
SOUTH RIVER, RARITAN RIVER BASIN, NJ
TOWNSENDS INLET TO CAPE NAY INLET, NJ

ESPANOLA VALLEY, RIO GRANDE & TRIBS., NM
LAS CRUCES, EL PASO & VIC., NM
RIO DE CHAMA,ABIQUIU DAM TO ESPANOLA,NM
ROCKY ARROYO/DARK CANYON,PECOS R & T.,NM

ATLANTIC COAST OF NEW YORK, NY
JAMAICA BAY, MARINE PARK & PLUMB BEACH,NY
LONG BEACH ISLAND, NY
MONTAUK POINT, NY
NORTH SHORE OF LONG ISLAND, NY
SOUTH SHORE OF STATEN ISLAND, NY
YONKERS SHORELINE, NY

METRO. REGION ON CINN, DUCK CK, OH

COLUMBIA SLOUGH, OR
JOHNSON CREEK, OR

CHARTIERS CREEK, PA
CONEMAUGH RIVER BASIN, PA
MILTON, PA

ARECIBO RIVER, PR
RIO GRANDE DE LOIZA, PR

BIG SIOUX RIVER, SIOUX FALLS, SD
WATERTOWN AND VICINITY, SD

REELFOOT, TN (MR&T)

GENERAL INVESTIGATIONS
STUDIES AND PROJECTS THAT WOULD NOT BE CONTINUED FOLLOWING COMPLETION OF THE CURRENT PHASE OF WORK
(CONTINUED)

BRAYS BAYOU, HOUSTON, TX
BUFFALO B. & T.–ADDICKS & BARKER RES, TX
CYPRESS CREEK, HOUSTON, TX
DALLAS FLOODWAY EXT., TRINITY R PROJ., TX
GREENS BAYOU, HOUSTON, TX
PECAN BAYOU, BROWNWOOD, TX
PLAINVIEW, BRAZOS RIVER BASIN, TX
SOUTH MAIN CHANNEL, TX
UPPER TRINITY RIVER BASIN, TX

UPPER JORDAN RIVER, UT

SANDBRIDGE, VIRGINA BEACH, VA

JACKSON HOLE RESTORATION, WY

NEW O&M POLICIES - DISTRIBUTION OF SAVINGS

Mr. MYERS. The budget appendix states that your proposed new policies will save $200 million in operation and maintenance funds between 1996 and 2000. What portion of that savings is derived from eliminating recreational harbor dredging and what portion is derived from turning over the operation and maintenance of flood control reservoirs to states and other local interests?

Dr. ZIRSCHKY. The new proposals in the Operation and Maintenance, General, account are to be gradually phased in over time, with savings beginning to be achieved in Fiscal Year 1998. It is estimated that this account would save a total of about $200 million in budget authority over a three year period between FY 1998 and 2000. Due to the time involved in transferring ownership of dam and reservoir projects, we do not expect to generate any savings prior to FY 2001 in this category. Since harbors generally do not involve transfer of real estate, we expect that O&M of all these projects can be assumed by State and local governments in each of the years 1998, 1999 and 2000, with commensurate savings of $200 million over this three year period.

CORPS RESTRUCTURING

Mr. MYERS: The budget press release states that you are continuing your efforts to restructure the Corps of Engineers. Would you please bring the Committee up to date on that effort?

Dr. ZIRSCHKY: In May 1994, the Secretary of the Army approved a new process for restructuring the Corps. In this process, we will analyze the roles, mission, business processes, and infrastructure of the Corps.

In June, we began the process of redefining the roles of the various organizational levels, for example, districts and divisions. A roles matrix for the organization was approved by Mr. West on September 30, 1994. We are in the process of implementing the roles matrix. New policy and technical review processes are being developed. The technical review process will soon be before the Secretary. Although neither the House nor the Senate Appropriations Committee was able to accept our offer to brief them on the proposed new review process, the Senate Environment and Public Works Committee and the House Transportation and Infrastructure Committee were briefed on the proposed process on January 19, 1995.

In the missions arena, we recently completed a review of the environmental mission of the Corps and a report on this review is available. We briefed the Senate Environment and Public Works Committee and the House Transportation and Infrastructure Committee on December 15, 1994. The President's budget presents the results of an Administration-wide review of many agencies missions, including the civil works program. This review was not a part of restructuring. We are, however, currently developing a review of our missions to help us meet our out-year budget reduction goals.

Under the business processes portion of restructuring, we are improving our continuing authorities program and examining means to shorten the time required for feasibility studies. Under infrastructure, we evaluated the size of the Corps dredge fleet and decided not to reduce the number of ships. We did, however, decide to significantly change how we use these ships. We are looking at interchanging the crews more to reduce the number of FTE's associated with dredging. We are also reducing the amount of dredging done with the Corps ships and will compete the Thompson against private industry.

Mr. MYERS: Are you considering closing any district or division offices?

Dr. ZIRSCHKY. No. We are centralizing some administrative functions such as personnel and finance and accounting services and we will be adjusting the staff of each office to correspond to its current and future workload, but we have no plans to close any Division or District office at this time.

Mr. MYERS. Does the budget request include any funds for a reorganization of the Corps of Engineers?

Dr. ZIRSCHKY. No it does not. In FY 1993, the Congress set aside $7 million for the costs of reorganizing Headquarters and Division offices. Approximately $6.8 million of these funds remain available and are being used, as appropriate, to fund restructuring or consolidation costs of Headquarters and Division offices. There is no request in the FY 1996 budget for any reorganization costs.

Mr. MYERS. What have you done to transfer decisionmaking authority out of Headquarters as recommended by the Vice President in the National Performance Review?

Dr. ZIRSCHKY. We have taken a number of actions to decentralize decisionmaking authority and to empower our field offices. Starting with my office, I have decreased the number of career Senior Executive Service positions by 50%. I also sponsored a review of authorities and responsibilities at all levels of the Corps, the result of which was a "Roles Matrix," approved by the Secretary of the Army, which clearly defines responsibilities at each level of the organization, and which formed the basis for follow-on downsizing and empowerment efforts. Specifically, and very important, we have recommended to the Secretary of the Army that responsibility for technical review be transferred from Headquarters and Division offices to District offices; and, through a combination of process efficiencies and delegations of authority, we have decreased the time required to plan and design selected small projects by more than 50%. Much of the reduction was in the time required for sequential review. I have approved the delegation of most decisionmaking authority for the Section 1135 program to the Divisions, and project management has been eliminated as a mission of my office and the Corps Headquarters. I have delegated authority to approve foreign travel and to accept reimbursable work for U.S. agencies overseas to the Corps Headquarters, for further delegation to Divisions along with appropriate management controls. In addition to these changes, we continue to identify potential delegations of authority consistent with our Roles Matrix, such as the review and signature authority for certain project cost sharing agreements and delegation of decisionmaking authority for projects in the Continuing Authorities Program.

ABILITY TO PAY RULES

Mr. MYERS. We understand that new ability to pay rules were published in the Federal Register in January of this year. Would you please summarize those new rules for us and provide a copy for the record?

Dr. ZIRSCHKY. A final amended rule was published in the Federal Register on January 26, 1995, in accord with the discretionary language contained in Section 201 of the Water Resources Development Act of 1992, Public Law 102-580. The final amended rule modifies the ability to pay determination for flood control projects to establish an additional eligibility criteria for reductions in the non-Federal cost share using high cost criteria. Under this amended rule, when the normal non-Federal share is high (i.e., exceeding 35 percent) and when the normal per capita non-Federal cost of construction exceeds $300, a reduction will be made to the standard non-Federal share, up to a maximum reduction of five percent of the total project cost. The amended rule continues the qualification requirements based on the benefits and income tests included in the final rule published in the Federal Register on October 2, 1989. Projects eligible for reductions under the benefits and income tests will receive the reduction based upon these tests, or the reduction under the high cost criteria in the amended rule, whichever is larger. A copy of the amended rule is provided for the record, as requested.

Signed at Washington, DC, this 20th day of January 1995.

Jospeh A. Dear,

Assistant Secretary of Labor

[FR Doc 95–1973 Filed 1–25–95; 8 45 am]

BILLING CODE 4510–26–P

DEPARTMENT OF DEFENSE

Department of the Army

Corps of Engineers

33 CFR Part 241

Flood Control Cost-Sharing Requirements Under the Ability To Pay Provision

AGENCY: U.S. Army Corps of Engineers, DOD.

ACTION: Final amended rule.

SUMMARY: This document presents the final rule partially implementing section 103(m) of Public Law 99–662, 33 U S C. 2213, which directs the Secretary of the Army to reduce the non-Federal cost-share of flood control and agricultural water supply projects under an "ability to pay" determination. This amended rule applies only to flood control projects. Guidelines for agricultural water supply projects have not been promulgated.

EFFECTIVE DATE: January 26, 1995

ADDRESSES: Headquarters, U.S. Army Corps of Engineers, Washington, DC 20314–1000.

FOR FURTHER INFORMATION CONTACT: Donald L. Barnes (202) 272–0120

SUPPLEMENTARY INFORMATION: A final rule for flood control projects implementing Section 103(m) of Public Law 99–662, 33 U S C., was published in the **Federal Register** (54 FR 40578), October 2, 1989. A proposed amended rule was published in the **Federal Register** (59 FR 32670), June 24, 1994, allowing 60 days for review and comment. The proposed amended rule was in accord with the discretionary language contained in Section 201 of Public 102–580. The single response to the request for comments indicated support for an amended rule.

The final amended rule modifies the ability to pay determination for flood control projects to establish an eligibility for reductions in the non-Federal cost share using high cost criteria. Under this amended rule, when the normal non-Federal share is high (i e., exceeding 35 percent) and when the normal per capita non Federal cost of Construction exceeds $300, adjustments can be made to the standard non Federal share based on these high cost considerations. Specifically, when both criteria are exceeded, the non-Federal share under the ability to pay provision will be either the requirement for lands, easements, rights-of-way, relocations, and disposal areas (LERRD's, i.e., no cash requirement) or 35 percent of the total project cost, whichever is greater. If LERRD's exceed 50 percent, the non-Federal share remains at 50 percent. This additional procedure does not change the benefits and income tests of the existing rule. Projects which would qualify for a reduction under the existing final rule, will receive a reduction from the high cost criteria, only if it provides a greater reduction than available under the benefits and income tests.

Periodic updating of the non-Federal per capita cost of construction will be accomplished and distributed to HQUSACE and to the field as soon as new data are available.

Background

In accordance with direction prescribed by Section 201 of the Water Resources Development Act of 1992, the Department of the Army conducted a study of the current ability to pay regulations for flood control projects This study found, that while non-Federal cost shares for most structural flood control projects were less than 35 percent, in some cases (16 percent of the projects in a sample group studied), the non-Federal shares exceeded 35 percent, due to the high cost for LERRD. In addition, while for a majority of projects the non-Federal per capita cost of construction (total non-Federal share of construction costs divided by the population included within the geographic jurisdiction of the non-Federal project sponsor) was less than $300, a significant number (34 percent of the sample studies) had per capita non-Federal costs that exceeded that amount. Given these circumstances, we concluded that there should be an adjustment in the normal non-Federal cost share based upon the high cost criteria.

The single response to the proposed amended rule was fully supportive of the recommended procedure for projects with high non-Federal cost shares.

Executive Order 12866 and Regulatory Flexibility Act

This rule is not a major rule within the meaning of Executive Order 12866, because it is not likely to result in (1) An annual effect on the economy of $100 million or more, (2) a major increase in costs or prices for consumers, individual industries, Federal, State, or local government agencies, or geographic regions: or (3) significant adverse effects on competition, employment, investment, productivity, innovation, or on the ability of United States based enterprises to compete with foreign based enterprises in domestic or export markets.

Pursuant to 5 U.S.C. Section 605(b), I hereby certify that this rule will not have a significant economic impact on a substantial number of small entities. Furthermore, the number of entities affected by this rule is small, and it imposes few, if any, administrative burdens of any sort on small entities

List of Subjects in 33 CFR Part 241

Community facilities, Flood control, Intergovernmental relations, Water resources.

For purposes set out in the preamble, 33 CFR Part 241 is amended as follows:

PART 241—FLOOD CONTROL AND COST SHARING REQUIREMENTS UNDER THE ABILITY TO PAY PROVISION

1. The authority for part 241 is revised to read as follows.

Authority: Sec 103(m), Pub L. 99–662 100 Stat 4082 (33 U S C 2201 et seq) as amended by Sec 201, Pub L 102–580, 106 Stat 4797 (33 U S C 2201 et seq)

2 Sections 241 1 through 241 3 are revised to read as follows.

§ 241.1 Purpose.

This rule gives general instructions on the implementation of section 103(m) of the Water Resources Development Act of 1986, Public Law 99–662, as amended by section 201 of the Water Resources Development Act of 1992, Public Law 102–588, for application to flood control projects.

§ 241.2 Applicability.

This rule applies to all U.S. Army Corps of Engineers Headquarters (HQUSACE), elements and Major Subordinate Commands and District Commands of the Corps of Engineers having Civil Works Responsibilities

§ 241.3 References.

References cited in paragraphs (f) thru (i) may be obtained from USACE Pub. Depot, CEIM–SP–D, 2803, 52d Avenue, Hyattsville, MD 20781–1102. References cited in paragraphs (d) and (e) may be obtained from the National Information Services, 5285 Port Royal Road, Springfield, VA 22161 References (a), (b) and (c) may be reviewed in your local library or by writing your local Congressperson

(a) Water Resources Development Act, 1986, Public Law 99–662, 100 Stat. 4082, 33 U.S.C. 2201 et seq.

(b) Water Resources Development Act 1992, Public Law 102–580, 106 Stat. 4797, 33 U.S.C. 2201 et seq.

(c) U.S. Water Resources Council, Economic and Environmental Principles and Guidelines for Water and Related Land Resources Implementation Studies, March 10, 1983.

(d) Office of Personnel Management, FPM Bulletin 591–30.

(e) Office of Personnel Management, FPM 591–32.

(f) U.S. Army Corps of Engineers, Engineer Regulation 1165–2–29.

(g) U.S. Army Corps of Engineers, Engineer Regulation 1165–2–121.

(h) U.S. Army Corps of Engineers, Engineer Regulation 1165–2–131.

(i) U.S. Army Corps of Engineers, Engineer Regulation 405–1–12.

3. Section 241.5 is amended by adding paragraph (d):

§ 241.5 Procedures for estimating the Alternative Cost Share.

* * * * *

(d) Additional consideration for high cost projects. For any project where the normal non-Federal share exceeds 35 percent, and the per capita non-Federal cost (i.e., normal non-Federal share of total construction costs divided by the population in the sponsor's geographic jurisdiction) exceeds $300, the non-Federal share under the ability to pay provision will be either LERRD's (i.e., no cash requirement) or 35 percent, whichever is greater. If LERRD's exceed 50 percent, the non-Federal share remains at 50 percent. Projects which qualify under the benefits and income tests will receive the reduction under the high cost criteria only if the high cost criteria results in a greater reduction in the non-Federal cost share.

§ 241.6 [Amended]

4. In § 241.6(a), the abbreviation "LCA" is revised to read "PCA".

5. In § 241.7, the terms "Local Cooperation Agreement" and "LCA" are revised to read "Project Cooperation Agreement and "PCA" respectively. In addition, this section is amended by revising paragraph (c)(2), and the first sentence of paragraph (e)(2) as follows:

§ 241.7 Application of test.

* * * * *

(c) * * *

(2) An exhibit attached to the Project Cooperation Agreement (PCA) will include the Benefits Based Floor (BBF) determined in § 241.5(a): the Eligibility Factor (EF) determined in § 241.5(b): If the Eligibility Factor is greater than zero but less than one, the estimated standard non-Federal share; the formula used in determining the ability to pay share as described in § 241.5(c)(1) through (c)(4); and a display of the non-Federal cost share under the high cost criteria described in § 241.5(d).

* * * * *

(e) * * *

(2) The non-Federal sponsor will be required to provide a cash payment equal to the minimum of five percent of estimated project costs, regardless of the outcome of the ability to pay test, unless any or all of the five percent cash requirement is waived by application of the high cost criteria described in § 241.5(d). * * *

* * * * *

Kenneth L. Denton,

Army Federal Register Liaison Officer

[FR Doc 95–1733 Filed 1–25–95; 8.45 am]

BILLING CODE 3710–92–M

ENVIRONMENTAL PROTECTION AGENCY

40 CFR Part 52

[DC 11–1–6741; FRL–5137–2]

Approval and Promulgation of Air Quality Implementation Plans; District of Columbia; Oxygenated Gasoline Program

AGENCY: Environmental Protection Agency (EPA).

ACTION: Final rule.

SUMMARY: EPA is approving a State Implementation Plan (SIP) revision submitted by the District of Columbia. This revision establishes and requires the implementation of an oxygenated gasoline program in the District of Columbia. The intended effect of this action is to approve, in a limited fashion, those subsections of the District of Columbia Municipal Regulations (DCMR) which pertain to oxygenated gasoline. It is also the effect of this action to disapprove, in a limited fashion, those subsections of the DCMR which pertain to oxygenated gasoline. This action is being taken under section 110 of the Clean Air Act (CAA).

EFFECTIVE DATE: This final rule will become effective on February 27, 1995.

ADDRESSES: Copies of the documents relevant to this action are available for public inspection during normal business hours at the Air, Radiation, and Toxics Division, U.S. Environmental Protection Agency, Region III, 841 Chestnut Building, Philadelphia, Pennsylvania 19107; the Air and Radiation Docket and Information Center, U.S. Environmental Protection Agency, 401 M Street, SW., Washington, DC 20460; and District of Columbia Department of Consumer and Regulatory Affairs, 2100 Martin Luther King Ave, SE., Washington, DC 20020.

FOR FURTHER INFORMATION CONTACT: Mrs. Kelly L. Bunker, (215) 597–4554.

SUPPLEMENTARY INFORMATION: On July 5, 1994 (59 FR 34401), EPA published a notice of proposed rulemaking (NPR) for the District of Columbia. The NPR proposed limited approval/limited disapproval of the District of Columbia's oxygenated gasoline regulation. The formal SIP revision was submitted by the District of Columbia's Department of Consumer and Regulatory Affairs on October 27, 1993.

The District of Columbia had submitted an oxygenated gasoline SIP on January 7, 1993. However, on July 6, 1993 EPA deemed the SIP incomplete due to the fact that the regulations were emergency and had an expiration of April 6, 1993 and because the SIP was submitted to EPA by an unauthorized authority. This incompleteness determination started the 18 month sanctions clock and the 24 month Federal implementation plan (FIP) clock. The October 27, 1993 oxygenated gasoline SIP submittal, which is the subject of this rulemaking action, stopped the 18 month sanctions clock but did not stop the 24 month FIP clock.

Other specific requirements of the District of Columbia's oxygenated gasoline regulation and the rationale for EPA's proposed action are explained in the NPR and will not be restated here. No public comments were received on the NPR.

Final Action

EPA is approving those subsections of 20 DCMR which pertain to oxygenated gasoline as a revision to the District of Columbia SIP. Those subsections of 20 DCMR include chapter 1, section 199 definitions for the terms blending plant, distributor, non-oxygenated gasoline, oxygenate, oxygenated gasoline, oxygenated gasoline control period, oxygenated gasoline control area, refiner, refinery, retailer, retail outlet, terminal, wholesale purchaser-consumer; chapter 5, section 500, subsections 500.4 and 500.5; shapter 5, section 502, subsection 502.18; chapter 9, section 904, subsections 904.1 and 904.2. EPA is also disapproving those subsections of 20 DCMR which pertain to oxygenated gasoline for the limited purpose of allowing the District of Columbia the opportunity to correct the deficiencies previously identified by EPA in the NPR. The deficiencies

CORPS MINIMUM DREDGE FLEET

Mr. MYERS. Dr. Zirschky, in October of last year you announced that the size of the Corps of Engineers' dredge fleet would not be reduced. Please explain your rationale for that decision.

Dr. ZIRSCHKY. Existing studies do not provide sufficient certainty that the dredging needs of the country can be met by the private sector alone. I also requested the Army Audit Agency to review the studies and a draft management plan. The results of their analysis indicate that the Corps dredges may be needed during high demand events. Therefore, I felt additional data were required before I could determine if the Corps minimum dredge fleet could be reduced any further. I will revisit this decision in a couple of years.

Mr. MYERS. What steps have you taken to implement the provisions of section 101 of the FY 1995 Energy and Water Development Appropriations Act?

Dr. ZIRSCHKY. The 7.5 million cubic yards of hopper dredge volume normally accomplished by the Corps minimum dredge fleet is being advertised for competitive bid.

Mr. MYERS. Have you been able to assess the cost effectiveness of having private industry perform dredging that had previously been performed by the Government hopper dredge fleet?

Dr. ZIRSCHKY. Industry dredging prices have been cost effective.

CORPS MINIMUM DREDGE FLEET
RESULTANT DELAYS

Mr. MYERS. Has any work been delayed as a result of having private industry perform the work rather than Government dredges?

Dr. ZIRSCHKY. No project dredging has been delayed as a result of private industry performing the work.

Mr. MYERS. How do you plan to operate the Government hopper dredge fleet in fiscal year 1996?

Dr. ZIRSCHKY. We are still preparing an efficient management plan for FY 1996. We envision the MCFARLAND will be out of service in 1996. We will monitor the private sectors capability in FY 1996 to determine the status of the MCFARLAND.

REVIEW TIME FOR LOCAL COOPERATION AGREEMENTS

Mr. Myers. What steps have you taken to reduce the review time for local cooperation agreements?

Dr. ZIRSCHKY. We have combined the review and approval of Project Cooperation Agreements and the decision documents upon which they are based in the Policy Review and Analysis Division. The PCA process has been revised to include strict schedules, fewer reviewers, better guidance to the districts, and delegation of execution authority to District Commanders. The average Washington level review and approval time was 120 days in 1993. Since May of 1994 we have reduced the average processing time to 60 days.

FY 1995 ACT DIRECTED STUDIES AND PROJECTS

Mr. MYERS. The FY 1995 Energy and Water Development Appropriations Act, P.L. 103-316. earmarked funds for various studies and projects named in the Act. Are those studies and projects proceeding as directed by Congress in the law?

Dr. ZIRSCHKY. Yes sir, the Department of the Army is proceeding in accordance with those directives.

FY 1995 REPORT DIRECTED STUDIES AND PROJECTS

Mr. MYERS. The reports accompanying the FY 1995 Energy and Water Development Appropriations Act directed the Corps of Engineers to undertake various studies and projects. Are those studies and projects proceeding as directed by Congress? Please provide a list of those which are not proceeding.

Dr. ZIRSCHKY. Yes, where Congress has provided a specific direction in the reports accompanying the fiscal year 1995 Energy and Water Development Appropriations Act with respect to a particular study or project, the Department of the Army will proceed in accordance with that directive, except: the Little River County, AR preconstruction engineering and design project where the local sponsor is unwilling to sign a feasibility study cost sharing agreement and Midtown Dam, ND study which is not authorized.

STATUS OF THE HARBOR MAINTENANCE TRUST FUND

Mr. MYERS. Please provide the Committee with your best estimate of payments into and appropriations out of the Harbor Maintenance Trust Fund for the next 5 years.

Dr. ZIRSCHKY. The current estimates of revenues and withdrawals from the Trust Fund, and the resulting balances are as follows.

	1995	1996	1997	1998	1999
		(In millions of dollars)			
Balance, Oct. 1	451.4	644.4	802.9	1030.2	1318.8
Receipts					
Harbor Maintenance Fee	634.7	679.1	724.4	764.0	791.0
Interest on Investments	30.6	38.4	46.9	58.5	73.0
Total Receipts	665.3	717.5	771.3	822.5	864.0
Outlays					
Corps of Engineers O&M and $1M in Admin. Expenses, start FY 96	462.0	500.0	485.0	475.0	465.0
St. Lawrence Seaway Dev. Corp./ Department of Transportation	10.4	10.4	10.4	10.4	9.5
Administrative expenses for Treasury		3.0	3.0	3.0	3.0
Pending legislation: NOAA	____	45.5	45.5	45.5	45.5
Total outlays	472.4	558.9	543.9	533.9	523.0
Balance, Sep. 30	644.3	802.9	1030.2	1318.8	1659.8

HARBOR MAINTENANCE TRUST FUND

Mr. Myers. Has the legislation been introduced that would permit the National Oceanic and Atmospheric administration to use the Harbor Maintenance Trust Fund to fund programs that benefit the commercial navigation industry?

Dr. Zirschky. To my knowledge, such legislation has not been introduced in the 104th Congress.

STATUS OF THE INLAND WATERWAYS TRUST FUND

Mr MYERS Will balances in the Inland Waterways Trust Fund be sufficient to meet the needs of new project construction and lock rehabilitation over the next 5 years? Please provide for the record your best estimate of payments into and appropriations out of the trust fund for the next 5 years. The appropriations out of the fund should be broken down into new work and rehabilitation.

Dr ZIRSCHKY Yes Based on FY 95-FY 99 projected budget authority for the projects currently eligible for funding from the trust fund, sufficient funds will be available. The current estimates of revenues and withdrawals from the fund, and the resulting balances are as follows:

	1995	1996	1997	1998	1999
	(In millions of dollars)				
Balance, Oct. 1	214.3	257.4	332.3	399.2	479.3
Receipts					
Fuel taxes	103.0	110.0	111.0	112.0	114.0
Interest on Investments	11.1	12.9	15.9	18.1	19.8
Total Receipts	114.1	122.9	126.9	130.1	133.8
Budget Authority					
Rehabilitation projects	20.9	4.6	3.6	3.9	1.7
New projects	50.1	43.4	56.4	46.1	48.3
Total Budget Authority	71.0	48.0	60.0	50.0	50.0
Balance, Sep 30	257.4	332.3	399.2	479.3	563.0

/

CORPS' VIEWS ON TAKING THE HARBOR MAINTENANCE AND INLAND WATERWAYS TRUST FUNDS OFF BUDGET

Mr MYERS What are your views on taking those two trust funds (Harbor Maintenance and Inland Waterways) off budget?

Dr ZIRSCHKY. In general, the Army is opposed to taking these trust funds off budget, however, before a final position is taken, we would need to know if the proposal would make these accounts Permanent Appropriations In that case, we would have to address the impacts on the IWWTF and the HMTF individually, since the projects funded from IWWTF are cost-shared 50/50 with the annual appropriations to the Construction, General account as opposed to the HMTF, which funds100% of eligible harbor maintenance costs.

JUVENILE FISH MITIGATION

Mr. MYERS. One of the items highlighted in your press release is the $78,800,000 included to continue the Juvenile Fish Mitigation program in the Columbia/Snake River Basin. Are you concerned that we continue to throw large sums of money at this problem even though no consensus has been reached on what needs to be done to restore the salmon runs?

Dr. ZIRSCHKY. We are very concerned that the funding provided for restoration of the salmon including the endangered Snake River salmon be used wisely. We will continue to consult with the National Marine Fisheries Service to obtain that agency's biological views on the actions needed to preserve and rebuild the salmon runs. We are also taking into consideration the Northwest Power Planning Council's comprehensive fish and wildlife plan. We will continue to look for every avenue to ensure that the most cost-effective means of protecting the fish are identified and considered.

Mr. Myers. Please provide for the record a list of the projects that make up the $106.4 million in continuing construction of environmental projects included in the budget request.

Dr. Zirschky. Yes, sir.

(The Information Follows)

ENVIRONMENTAL PROJECTS IN CONTINUING CONSTRUCTION

PROJECT	FY 96 REQUEST ($000)
Tennessee - Tombigbee Waterway Wildlife Mitigation, AL & MS	$12,400
Sonoma Baylands Wetland Demonstration Project, CA	500
Yolo Basin Wetlands Sacramento River, CA	720
Missouri River Fish and Wildlife Mitigation, IA, NE, KS & MO	5,700
Chesapeake Bay Oyster Recovery, MD	230
Missouri National Recreational River, NE & SD	20
Columbia River Juvenile Fish Mitigation, WA, OR & ID	78,800
Lower Snake River Fish and Wildlife Compensation, WA, OR & ID	8,000
TOTAL	$106,370

RETURN ON INVESTMENT

Mr. MYER. How do you compute the return on investment for the Research and Development Program?

Dr. ZIRSCHKY. The benefits from our Research and Development activities are measured in savings to district projects and activities in the planning, design, construction, operation and maintenance programs. The investment represents the dollar resources executed through the Corps direct funded Research and Development program. The 6 to 1 return on investment portrays a 10-year assessment of specific district project savings through new technology application that resulted from the direct funded civil works Research and Development program, and continues to produce savings today. The savings represent a range of applications identified by district offices from project construction costs reduction to annual operation and maintenance savings.

Mr. Myers. You state that the Corps' projected execution rate for fiscal year 1995 is 83%. Does that represent the percentage of funds obligated or expended?

Dr. Zirschky. Mr. Chairman, the anticipated rate of performance is that of accrued expenditures.

Mr. Myers. What is your projected execution rate for fiscal year 1996?

Dr. Zirschky. At this time we have not detailed our expenditure schedules but we do project that we will obligate about 91 percent of available funds.

NATIONAL ASSESSMENT OF WATER SUPPLY DEMAND AND AVAILABILITIY

Mr. MYERS. In light of the changes you have proposed in one of the Corps' basic missions, flood control, we find it hard to understand why, at the same time, you are proposing a new nationwide study of water supply problems. Can you explain why the Federal Government should have a role in water supply, when it was recognized in the Water Resources Development Act of 1986 as a local problem, but not flood control.

Dr. ZIRSCHKY. The intent of the study is to conduct a nationwide assessment of water demand and availability for all significant water uses to the year 2025. We had not intended to limit the assessment only to municipal and industrial water supply, which is the conventional understanding of the term "water supply". The use of the phrase "water supply" is intended to include the current and future availability and use of freshwater supplies for all competing purposes. There has not been such an assessment since the Water Resources Council's Study of 1978. Since that time many changes in technology, laws, population redistribution and in environmental values have resulted in significant shifts in all water uses. We need to document those shifts and undertake a detailed accounting of all water uses so that the private sector and appropriate levels of government could better evaluate the likely future demands to better manage our Nations's existing scarce freshwater supplies - at the local, state and federal levels.

NEW PROCESSES

Mr. MYERS: Could you briefly describe the new technical review process, the new policy review process, and the new division organization guidelines?

Dr. ZIRSCHKY: Proposals for new technical and policy review processes are under development. A briefing will soon be scheduled to discuss the proposed new technical review process with the Secretary. Similarly, we are in the process of presenting the proposed Division Organizational Guidelines to the Secretary.

The proposed new technical review process relies on the District offices for technical review and the Division for quality assurance: was the review done and by the right people? Under the current proposal, Districts have a number of options to select from, in coordination with the Divisions, when deciding how the technical review will be done. The process was developed by a task force which included representatives from various Corps offices and organizational levels.

A new policy review process is still under development and has not been formally proposed. It is anticipated that a process will be proposed before April 1, 1995. The overall goal of the new review processes is to have one technical review and one policy review, as opposed to the old system which had up to five Army reviews (e.g., District, Division, Washington Level Review Center, Headquarters, and the Office of the Assistant Secretary (Civil Works).

A task force also prepared a recommendation for the internal organization of divisions. This proposal recommends a division strength of 100 FTE's, on average. Specific strength would vary with workload and other considerations. The task force recommendation recently completed a HQ Army review and will soon be presented to the Secretary for his consideration.

PROJECTS WITH NO FOLLOW-ON FUNDING

Mr. MYERS. General Williams, you mentioned that the fiscal year 1996 budget request includes follow-on funding for nearly all projects and studies that are underway. Would you please provide a list of those projeccts for which follow-on funding is not being requested along with the reason why?

(The information follows:)

DEPARTMENT OF THE ARMY
CORPS OF ENGINEERS – CIVIL WORKS
CONSTRUCTION, GENERAL
PROJECTS UNDERWAY FOR WHICH FUNDS WERE NOT REQUESTED IN FY 1995

PROJECT TITLE	REASON NOT IN BUDGET
ALLENDALE DAM, RI	FULLY FUNDED TO AUTHORIZED LIMIT
ARKANSAS RIVER LEVEES, AR	NOT IN ACCORD WITH ADMINISTRATION'S PRIORITIES
BROAD TOP REGION, PA	NOT IN ACCORD WITH ADMINISTRATION'S PRIORITIES
BROWARD COUNTY, FL	REIMBURSEMENT FOR NOURICHMENT NOT REQUIRED TILL FY 97
CEDAR RIVER HARBOR, MI	CARRYOVER FUNDS ADEQUATE FOR FY 96
COLUMBIA RIVER TREATY FISHING ACCESS SITES, OR & WA	CARRYOVER FUNDS ADEQUATE FOR FY 96
DILLINGHAM, AK SHORELINE EROSION	NOT IN ACCORD WITH ADMINISTRATION'S PRIORITIES
FIRE ISLAND INLET TO JONES INLET, NY	CURRENT NOURISHMENT FULLY FUNDED
HACKENSACK MEADOWLANDS, NJ	NOT IN ACCORD WITH ADMINISTRATION'S PRIORITIES
LAKE PONTCHARTRAIN AND VICINITY, LA (JEFFERSON PARISH)	CARRYOVER FUNDS ADEQUATE FOR FY 96
LAKE PONTCHARTRAIN STORM WATER DISCHARGE, LA	NOT IN ACCORD WITH ADMINISTRATION'S PRIORITIES
ONONDAGA LAKE, NY COMBINED SEWER OVERFLOW	NOT IN ACCORD WITH ADMINISTRATION'S PRIORITIES
PINELLAS COUNTY, FL	CURRENT NOURISHMENT FULLY FUNDED
RED RIVER EMERGENCY BANK PROTECTION, AR	NO PLAN DEVELOPED
RED ROCK DAM AND LAKE, IA	NOT IN ACCORD WITH ADMINISTRATION'S PRIORITIES
SACRAMENTO RIVER FLOOD CONTROL PROJECT, CA (GCID)	CARRYOVER FUNDS ADEQUATE FOR FY 96
SAVANNAH HARBOR DEEPENING, GA	PROJECT FULLY FUNDED
SAYLORVILLE LAKE ROAD, IA	NOT IN ACCORD WITH ADMINISTRATION'S PRIORITIES
SOUTH CENTRAL PA ENVIRONMENTAL RESTORATION, PA	FULLY FUNDED TO AUTHORIZED LIMIT
SOUTHERN WEST VIRGINIA ENVIRONMENTAL RESTORATION, WV	FULLY FUNDED TO AUTHORIZED LIMIT
ST. JOHNS COUNTY (ST. AUGUSTINE BEACHES), FL	NOT IN ACCORD WITH ADMINISTRATION'S PRIORITIES

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GENERAL INVESTIGATIONS
STUDIES AND PROJECTS UNDERWAY FOR WHICH FUNDS WERE NOT REQUESTED IN FY 1996

LITTLE RIVER COUNTY, AR preconstruction engineering and design project where the local sponsor is unwilling to sign a feasibility study cost sharing agreement.

Additionally, the following 34 studies and projects which were underway in fiscal year 1995 were not budgeted because the fiscal year 1995 funds provided would complete a study phase, e.g. reconnaissance or feasibility, and they did not meet the criteria of the new policy:

ARKANSAS RIVER, TUCKER CREEK, AR

CITY OF HUNTINGTON BEACH, ORANGE COUNTY, CA
KAWEAH RIVER, CA
NORTHERN LOS ANGELES COUNTY, CA
SACRAMENTO – SAN JOAQUIN DELTA, WESTERN DELTA ISLANDS, CA
SAN CLEMENTE CREEK, CA
SAN FRANCISCO COUNTY, OCEAN BEACH, CA
SAN JOAQUIN RIVER BASIN, FIREBAUGH AND MENDOTA, CA
SAN JOAQUIN RIVER BASIN, TULE RIVER, CA
SILVER STRAND SHORELINE, CORONADO, CA
UPPER PENITENCIA CREEK, CA

MANITOU SPRINGS, CO

COAST OF FLORIDA EROSION & STORM PROTECTION, FL

LITTLE WOOD RIVER, ID (VICINITY OF GOODING AND SHOSHONE), ID

BREVOORT LEVEE, IN
UPPER TIPPECANOE RIVER BASIN, IN

JACKSON METROPOLITAN AREA, MS

BARNEGAT INLET TO LITTLE EGG INLET, NJ

ESPANOLA VALLEY, RIO GRANDE & TRIBUTARIES, NM

LOWER TRUCKEE RIVER, NV

ADDISON, NY

SAW MILL RIVER AT ELMSFORD AND GREENBURGH, NY

BLACKLICK CREEK, OH

BIRD CREEK BASIN, OK

SCHYULKILL RIVER BASIN, SCHUYLKILL HAVEN AREA, PA

RIO GUANAJIBO, PR
RIO NIGUA AT SALINAS, PR

CHARLESTON STORM DAMAGE REDUCTION, SC

WOLF RIVER, MEMPHIS, TN (MR&T)

GRAHAM, TX (BRAZOS RIVER BASIN)
RAYMONDVILLE DRAIN, TX

CHESAPEAKE BAY SHORELINE, HAMPTON, VA
WILLOUGHBY SPIT AND VICINITY, NORFOLK, VA

OCEANA, WV

POLICY REVIEW AT HEADQUARTERS

MR. MYERS. You stated that in support of the National Performance Review you have streamlined operations by centralizing policy review at headquarters. Is that consistent with the National Performance Review's stated goal of reducing power of headquarters vis-a-vis field operations?

DR. ZIRSCHKY. In June 1994, we began the process of redefining the roles of the various organizational levels. At that time policy and technical review was accomplished at the District, Division, Washington Level Review Center, Headquarters and the Office of the Assistant Secretary of the Army (Civil Works). We are streamlining operations by centralizing the technical review at the District level. I believe it is an appropriate function of the Headquarters to accomplish a policy review and, as such, I support centralizing it at the Headquarters.

CORPS WORKFORCE REDUCTIONS

Mr. MYERS: Your statement indicates that by fiscal year 1999 you will have reduced the size of the Corp's workforce by 12%. What is the base year that you are measuring those reductions against?

General WILLIAMS: The base year is the beginning of fiscal year 1993. This was the year Executive Order 12839 initiated the drawdown of the Federal workforce. Federal workforce reduction targets were subsequently modified through the National Performance Review to 252,000 FTE and the Federal Workforce Restructuring Act to 272,900 FTE.

Mr. MYERS: What change has there been in the size of the headquarters' staff during the same period?

General WILLIAMS: The FY 95 budget marked the mid-point in a series of reductions in Corps and headquarters staffing that began in FY 89 and will continue through FY 99. From FY 89 to FY 95, the total Corps Civil-funded workforce has been reduced approximately 7 percent. Consistent with Congressional intent, the General Expense funded workforce was reduced from 1,750 FTE to 1,485 FTE, or 15 percent during this period. Within the GE reductions, the headquarters went from 630 to 497 GE-funded FTE (prior to the FY 95 transfer of the Washington Level Review Center to HQ), a net reduction of 21 percent, but an actual reduction of about 24 percent given the FTE absorbed as a result of direct-funding formerly Centralized Activities, organizational restructuring and mission relaignment.

Mr. MYERS: You also indicate that you will need to reduce the size of your staff by an additional 9% by 2000. How will these reductions be made?

General WILLIAMS: Reductions estimated at an additional 9 percent would be required only to the extent that the Corps' workload is reduced. Reductions greater than our Streamlining Plan would be solely due to reduced program size and would be taken as justified by decreased funding/workload at each location.

DELEGATION OF DECISION MAKING

Mr. Myers. You stated that you are delegating more decisionmaking responsibilities down to the district level. Can you give us some examples?

General Williams. Yes, Sir. Many of the Corps processes which provide for Washington level approval have been examined for potential delegation to district level. Two of the more important steps that have been taken to date are the delegation of approval of Section 14 projects and approval of initiation of Section 1135 studies to the District Commander. We are continuing to look at other actions that can be similarly delegated.

FUTURE DIVISION ROLES

Mr. MYERS: If policy review is being centralized at headquarters and technical review is being decentralized to the districts, what role is left for the division offices?

General WILLIAMS: The Division offices have an important role to play. Our division offices are very similar to the regional office of other agencies, e.g., EPA. A very important function provided by divisions is co-ordination with other government agencies on a regional basis. For example, the National Marine Fisheries Service Office (Region X) in Seattle works closely with our Division office in Portland on issues such as Pacific Northwest Salmon survival and recovery. Both work with the Bonneville Power Administration, also located in Portland, and with the Bureau of Reclamation office in Boise, Idaho, as well as with the States and Tribes to ensure salmon restoration. While such coordination could be done in Washington, we believe it's best to solve regional problems locally rather than in Washington, if possible.

Divisions also have a significant role in District Management. First, as the Army downsizes, more Districts are being commanded by junior officers. The Division Commander, typically a former District Engineer, provides the necessary senior leadership to resolve complex problems. The Division Commander and his or her staff's experience is often crucial in resolving such problems. Finally, as noted above, the Divisions play a significant role in quality assurance.

As our personnel ceilings decrease, however, we are going to have to be mindful of the Divisions ability to provide support. Our Division organizational task force lays out a strategy to downsize Divisions below 100 FTE, if necessary, by identifying functions which in its view would have to be dropped.

HEADQUARTERS RESTRUCTURING

Mr. MYERS. You indicate that you were continuing to look at ways to make operations at Corps' headquarters more efficient. Please bring the Committee up to date on those efforts.

General WILLIAMS. A draft report on Headquarters restructuring will be circulated for comments on March 1 for 30 days prior to finalizing. The final report, currently scheduled to be completed in April, will be submitted by the Headquarters Restructuring Task Force to the Chief of Engineers and the Army Secretariat for final determinations. Copies of the draft report will be furnished the Committee in early March and an offer will be made at that time to brief the Committee members and/or staff if they so desire.

CORPS OF ENGINEERS FINANCIAL MANAGEMENT SYSTEM

Mr. Myers. Please provide the Committee with a status report on the development of the Corps of Engineers Financial Management System. If you wish you can provide a more detailed progress report for the record.

General WILLIAMS. We are providing the Committee with a quarterly progress report on the development and deployment of the Corps of Engineers Financial Management System (CEFMS) in accordance with your request in House Report 103-533, dated May 26, 1994, to accompany the Energy and Water Development Appropriations Act, 1995. As noted in our first quarter report, dated February 14, 1995, the Corps completed most of the development and deployment efforts which it had programmed for the first quarter. However, we did not complete all of the development or developmental testing of the functionalities which will be fielded for the first time in the Southwestern Division.

During the first quarter of FY 95, the Corps did not install CEFMS at any additional test sites. Instead it concentrated on debugging and increasing the operational efficiency of the functionalities previously fielded at test sites, and on completing the development and developmental testing of the functionalities which will be fielded first in the Southwestern Division, including the project management front-end loader, hydroelectric power accounting, operating budget, contributed funds, and an interface with the Real Estate Management Information System.

During the second quarter, the Corps will resume test installation of CEFMS in the Southwestern Division, beginning, on March 1, 1995, with the division office. I will provide you with a progress report for the second quarter no later than May 15, 1995.

UNOBLIGATED BALANCES

Mr. MYERS. The budget states that you will end fiscal year 1995 with over $58 million in unobligated balances in the General Investigations program and over $480 million in unobligated balances in the Construction, General program. What is the reason for these large unobligated balances? What steps are you taking to improve the Corps of Engineer's ability to execute the program that is presented to Congress each year.

General WILLIAMS. Mr. Chairman, the Corps is taking action in two problem areas to reduce our unobligated balances. First, we are attempting to provide more realistic estimates of our funding needs. In the past, our estimates were generally based on an optimistic view of the progress of each individual project. We have found that even those schedules developed in the first quarter of the current fiscal year have overstated total funding needs by substantial percentages. Clearly, we need to refine our processes for developing cost estimates and schedules, and for converting these schedules and estimates into our requirements for new budget authority. This year, we are reducing our request by over $357 million to better align that request to our expected outlays. Second, we are intensively managing our program execution in order to resolve, avoid, or simplify those impediments to project execution that result in avoidable schedule delays. For example, we have made specific improvements in the area of Headquarters executive direction and management to make it more accountable to the project schedule. We have made improved program execution a major objective of our senior Headquarters staff, and it is the principal topic at the Project Review Board meetings and at quarterly Command Management Reviews. The progress of the largest studies and projects in the civil works study and design and construction programs will be monitored on a monthly basis to detect program slippages early, while corrective action can still be taken. These projects account for approximately one-half of the General Investigations and Construction, General funds scheduled for expenditure during Fiscal Year 1995. We will continue to reevaluate our funding requirements periodically, and to adjust our resources to most efficiently accomplish our mission.

ADEQUACY OF MAINTENANCE DREDGING PROGRAM

Mr. MYERS. As you know, balances in the Harbor Maintenance Trust Fund continue to grow, with the balance at the end of fiscal year 1996 estimated to be over $800 million. Has your maintenance dredging program been constrained by the fact that all the funds in the Trust Fund have not been available for use? In other words, are there any projects which are not being adequately maintained?

General WILLIAMS. Mr. Chairman, development of the budget for maintaining Federal navigation projects is based solely on the usage of the harbor and what the requirements are to provide a safe and reliable channel. Balances in the Harbor Maintenance Trust Fund are not a consideration. The maintenance dredging program has not been constrained and sufficient resources are available from the Trust Fund to adequately maintain Corps navigation projects.

UNBUDGETED PROJECTS/ELEMENTS

Mr. MYERS. The President's budget indicates a savings of $46 million in fiscal year 1996 because follow-on funding is not provided for "uneconomic projects." Please provide for the record a list of those projects.

Dr. ZIRSCHKY. Yes, there are 6 projects and elements of 3 projects that make up the savings of $46 million. These projects and elements, characterized as uneconomic, were not in accord with the Administrations traditional budget priorities and were uneconomic, low priority, or the responsibility of local interests. I will provide the Committee with a list.

(The information follows:)

DEPARTMENT OF THE ARMY
CORPS OF ENGINEERS – CIVIL WORKS
CONSTRUCTION, GENERAL
UNBUDGETED PROJECTS/ELEMENTS

PROJECT TITLE
LEVISA AND TUG FORKS AND UPPER CUMBERLAND RIVER, WV, VA & KY (L&TF)
  L&TF – UPPER MINGO ELEMENT
  L&TF – HATFIELD BOTTOM ELEMENT
  L&TF – WILLIAMSBURG ELEMENT
  L&TF – HARLAN ELEMENT
  L&TF – MIDDLESBORO ELEMENT
LAKE PONTCHARTRAIN AND VICINITY, LA – PARALLEL PROTECTION ELEMENT
DES MOINES RECREATION AREA, IA
WALLISVILLE LAKE, TX
SANTA ANA RIVER, CA – SAN TIMOTEO ELEMENT
RICHMOND FILTRATION PLANT, VA
CASINO BEACH, IL
RED RIVER BELOW DENISON DAM, LA
OUACHITA RIVER LEVEES, LA

FY 1996 CORPS ENVIRONMENTAL ACTIVITIES

Chairman Myers. Please provide for the record a breakdown, by project or program, of the funds included in the fiscal year 1996 budget request for environmental activities.

MG Williams. Yes Sir

[THE INFORMATION FOLLOWS]

DEPARTMENT OF THE ARMY
CORPS OF ENGINEERS - CIVIL WORKS
ENVIRONMENTAL ACTIVITIES
FY 1996 FUNDING BY CATEGORY
(DOLLARS IN THOUSANDS)

ENVIRONMENTAL CATEGORY	FY 96 FUNDING BY ACCOUNT				TOTAL FY 96 BUDGET
	GI	C,G	O&M,G	OTHERS	
CIVIL WORKS APPROPRIATIONS					
STUDY AND PROJECT SPECIFIC					
MITIGATION	1,463	152,357	0	2,190	156,010
RESTORATION	12,072	36,345	35,960	21,375	105,752
PROTECTION	1,354	2,648	71,222	4,226	79,450
CLEANUP	10	12,010	0	0	12,020
COMPLIANCE	190	203	9,216	255	9,864
SUBTOTAL - STUDY & PROJECT SPECIFIC	15,089	203,563	116,398	28,046	363,096
PROGRAMMATIC ACTIVITIES.					
ENVIRONMENTAL REVIEW GUIDE FOR OPERATIONS (ERGO)			2,000		2,000
HAZARDOUS WASTE SITE RESTORATION INITIATIVE			3,500		3,500
NATURAL RESOURCES INVENTORY			750		750
OIL SPILL RESEARCH APPROPRIATION				675	675
POLLUTION PREVENTION PROGRAM			5,000		5,000
PROJ MOD FOR IMPROV OF ENVIR (SEC 1135)		23,780			23,780
REGULATORY.PROGRAM				112,000	112,000
RESEARCH AND DEVELOPMENT	11,377	0	3,500	0	14,877
WETLANDS ACTION PLAN IMPLEMENTATION			650		650
WETLANDS AND AQUATIC HABITAT CREATION		15,000			15,000
SUBTOTAL - PROGRAMMATIC ACTIVITIES	11,377	38,780	15,400	112,675	178,232
SUBTOTAL - CIVIL WORKS APPROPRIATIONS	26,466	242,343	131,798	140,721	541,328
DIRECTED PROGRAMS [TRUST FUNDS]					
COASTAL WETLANDS RESTORATION TRUST FUND				35,000	35,000
TOTAL - FUNDED ENVIRONMENTAL ACTIVITIES	26,466	242,343	131,798	175,721	576,328
REIMBURSED PROGRAM (SUPPORT FOR OTHERS)					
EPA					
SUPERFUND				203,000	203,000
DEPARTMENT OF ENERGY				140,000	140,000
OTHER GOVERNMENTAL AGENCIES				41,000	41,000
TOTAL - REIMBURSED PROGRAM				384,000	384,000
TOTAL - ENVIRONMENTAL ACTIVITIES	26,466	242,343	131,798	559,721	960,328

Mr. Myers. As you know, we have been concerned that Corps projects often experience schedule slippages and cost increases. Are you making progress towards eliminating those problems?

General Williams. Mr. Chairman, I believe that we have made great strides in cost estimating, but there is more to be accomplished with regard to scheduling. First with respect to cost estimating, the number of projects with cost increases from year to year continues to decline. We have established discipline in our cost estimating procedures. However, as noted in our discussion on program performance, we have not done as well in eliminating schedule slippages. As I noted in my prepared statement we have in connection with formulating this budget request made a concerted effort to schedule projects in accordance with our capability to perform work in each district. In addition we have placed increased emphasis on partnering relationships with project sponsors.

CIVILIAN EMPLOYMENT

Mr. MYERS: What will the Corps' level of civilian employment be at the end of fiscal year 1995 and at the end of fiscal year 1996? How does this compare with fiscal year 1993?

General WILLIAMS: At the end of fiscal year 1995 the Corps Civil Works program is programmed to have 27,839 Full Time Equivalents. Our FY 96 Streamlining target is 27,555 FTE, a reduction of 284 FTE from FY 95 or 1,639 FTE from FY 93. However, based on the current budget we estimate that we might use approximately 196 FTE less than our targeted amount due to workload reductions which would be a reduction of 480 FTE from FY 95 to FY 96, or 1,835 FTE reduction from FY 93. This is measured against a beginning of fiscal year 1993 strength of 29,194 FTE.

Mr. MYERS: In addition to the Corps totals, please provide the same information for the districts, the divisions, and headquarters.

General WILLIAMS: The same information for districts, divisions and headquarters would be the following.

(The information follows:)

FULL TIME EQUIVALENT LEVELS

	Baseline 1 Oct 92	Streamline Plan Targets 30 Sep 95		Policy Changes 30 Sep 96
Location	FY 1993	FY 95	FY 96	FY 96
Districts	25,705	24,505	24,254	24,058
Divisions	1,650	1,530	1,515	1,515
1,436				
Headquarters *	587	575	569	569
HQ Spt Acty's & Sep offices	343	306	303	303
R&D Labs	909	923	914	914
Total	29,194	27,839	24,555	27,359

* Note headquarters number includes all sources of FTE, including General Expense FTE, formerly ceiling exempt FTE, fee for service FTE and reimbursable work for other agencies FTE.

NEW STUDY STARTS

Mr. MYERS. Please provide for the record the authority for each of the new reconnaissance studies, including the National Water Supply Demand and Availability, contained in the fiscal year 1996 budget request.

General WILLIAMS. The budget request for fiscal year 1996 new start reconnaissance studies with the corresponding authorizations are as follows:

Nome Harbor, AK	-	House Committee on Public Works Resolution, December 2, 1970
Kuskokwim River, AK	-	House Committee on Public Works Resolution, December 2, 1970
Chena River Watershed Study, AK	-	House Committee on Public Works Resolution, December 2, 1970
Mc Kinney Bayou, AR & TX	-	Flood Control Act of 3 August 1955
San Francisco Bay Bar Channel, CA	-	Rivers and Harbors Act of 1965
Southampton Shoal Channel, CA	-	Rivers and Harbors Act of 1965
New Savannah Bluff Lock & Dam, GA	-	Section 216 of the 1970 Flood Control Act
Atlanta Watershed Study, GA	-	House Committee on Public Works and Transportation Resolution, 28 September 1994
Maui Second Harbor, Maui, HI	-	Section 209 of the River and Harbor Act of 1962
Blackstone River Watershed Restoration, MA & RI	-	Senate Committee on Public Works Resolution, 12 September 1969
Lower Eastern Shore, MD	-	Section 307 of the Water Resources Development Act of 1990
Smith Island Environmental Restoration, MD	-	Section 307 of the Water Resources Development Act of 1990
Anacostia River Federal Watershed Impact Assessment, MD & DC	-	Section 114(d) of the Water Resources Development Act of 1992
Pomme De Terre - Minnesota River Valley, MN	-	Flood Control Act of 1936, House Public Works Committee Resolution, 18 Sep 44, 15 Jul 47, and 10 May 62, and Senate Public Works Committee Resolutions dated 17 Mar 64 and 5 Dec 68
Stony Brook, Princeton Township, NJ	-	Section 729 of the Water Resources Development Act of 1986
Cimarron River and Tributaries, NM, OK, CO, & KS	-	Section 208 of the Flood Control Act, 27 October 1965
Matituk Harbor, NY	-	House Committee on Public Works Resolution, 24 Sep 1992

Optima Lake, OK - Section 216 of the Flood Control Act of 1970

Walla Walla River Watershed, OR & WA (Columbia River Basin) - Senate Committee on Public Works Resolution, 27 July 1962

Youghiogheny Lake, PA & MD - Section 216 of the Flood Control Act of 1970

Georgetown Harbor, SC - House Committee on Public Works Resolution, 17 May 1994

Waccamaw River, SC - House Committee on Public Works and Transportation, 13 May 1993

Santee, Cooper, Congaree Rivers, SC - House Committee on Public Works and Transportation, 1 Aug 1990

GIWW - Port O'Conner to Corpus Christi Bay, TX - Section 216 of the 1970 Flood Control Act

John H. Kerr Lake, VA & NC - Section 216 of the 1970 Flood Control Act

Nanesemond River Basin, VA - Section 729 of the Water Resources Development Act of 1986

Crown Bay Channel, VI - Water Resources Development Act of 1986

Mount St. Helens Environmental Restoration, WA - Section 216 of PL 91-611: House Resolution, 23 July 1946, and Supplemental Appropriations Act of 1985 PL 99-88, 15 August 1985

Duwamish and Green River, WA - Section 209 of the Flood Control Act of 1962

Stillaguamish River, WA - Section 209 of the Flood Control Act of 1962

National Assessment of Water Supply Demand and Availability - Sections 707 and 729 of the Water Resources Development Act of 1986

Mr. MYERS. Please provide for the record a listing of all the new feasibility studies included in the budget request along with the scheduled date for execution of the feasibility cost-sharing agreement for each.

General WILLIAMS. The feasibility studies which are scheduled to be initiated in fiscal year 1996 with the corresponding scheduled feasibility cost-sharing agreement execution date are as follows:

Study	Feasibility Cost-Shared Agreement Scheduled Execution Date
Northern Sea Route, AK	Nov 95
St Paul Harbor, AK	Jan 96
Alamo Lake, AZ	Jun 96
Central Basin Groundwater Project, CA	Oct 95
Marina Del Rey and Ballona Creek, CA	Jan 96
Newport Bay Harbor, CA	Jan 96
Pillar Point Harbor, CA	Jul 96
San Francisco Harbor, CA	Jun 96
San Francisco Bay, Leonard Ranch (Disposal), CA	Nov 95
Barbers Point Harbor Modification, Oahu, HI	Oct 95
Lake Charles Ship Chan, By-Pass and Gen Anchorage Area, LA	Oct 95
St. Louis Region, MO	May 96
Lowndes County Port Barge Fleeting Area, MS	Not Required
Lake Montauk Harbor, NY	Oct 95
Reynold's Channel and New York State Boat Channel, NY	Nov 95
James River Environmental, SD	Oct 95
Metro Center Levee, Davidson Co., Nashville, TN	Dec 95
Cypress Valley Watershed, TX	Mar 96
North Branch Potomac River Environmental Restoration WV & MD	Mar 96

AUTHORIZED PROJECTS

Mr. MYERS. Are all the projects for which funds have been requested in fiscal year 1996 authorized?

General WILLIAMS. Yes, all the projects are authorized.

Mr. MYERS. Are there any projects budgeted for construction that will require reauthorization under the provisions of section 902 of P.L.99-662.

General WILLIAMS. Only one project, Ramapo River at Oakland, NJ, requires reauthorization under section 902.

BUDGETED PROJECTS LACKING EXECUTED PROJECT COOPERATION AGREEMENTS

Mr. MYERS. Please provide a list of the construction projects included in the budget request that do not have signed Project Cooperation Agreements along with the scheduled dates for execution of those agreements.

General WILLIAMS. Mr. Chairman, I will provide such a list.

(The information follows:)

BUDGETED PROJECTS WITHOUT EXECUTED PROJECT COOPERATION AGREEMENTS

PROJECT NAME	SCHEDULED PCA EXECUTION DATE
MCCOOK AND THORNTON RESERVOIRS, ILL	JUN 1996
MISSOURI RIVER LEVEE SYSTEM (L-385), IA, NE, KS, MO	OCT 1996
MISSOURI RIVER LEVEE SYSTEM (L-142), IA, NE, KS, MO	NOV 1997
MUSCATINE ISLAND, IA	MAY 1995
HOMME DAM (DAM SAFETY), ND	JUN 1995
MISSISSIPPI RIVER-GULF OUTLET (INDUSTRIAL LOCK), LA	UNSCHED
EIGHT MILE CREEK, AR	JUL 1995
MISSISSIPPI & LOUISIANA ESTUARINE AREA, MS & LA	JUL 1995
WHITEMAN'S CREEK, AR	MAY 1995
STE. GENEVIEVE, MO	APR 1995
PERRY CREEK, IA	MAR 1995
MISSOURI NAT. REC. RIVER, NE & SD	UNSCHED
ALAMORGORDO, NM	JAN 1998
MIDDLE RIO GRANDE, NM	MAY 1995
RIO GRANDE FLOODWAY, NM	MAY 1996
WACO LAKE (DAM SAFETY), TX	OCT 1997
HOWARD HANSEN DAM (DAM SAFETY) WA	JUN 1995
LOS ANGELES HARBOR, CA	NOV 1995
MORRO BAY HARBOR, CA	MAR 1995
RICHMOND HARBOR, CA	DEC 1995
NOGALES WASH, AZ	MAR 1996
LOS ANGELES COUNTY DRAINAGE AREA, CA	MAR 1995
WEST SACRAMENTO, CA	SEP 1995
PORT JERSEY, NJ	MAR 1997
SALEM RIVER, NJ	APR 1995
LACKAWANNA RIVER, OLYPHANT, PA	MAY 1997
LACKWANA RIVER, SCRANTON, PA	FEB 1997
WYOMING VALLEY (LEVEE RAISING), PA	NOV 1995
L&TF - GRUNDY, VA	SEP 1995
RAMAPO RIVER AT OAKLAND, NJ	OCT 1996
NORTH ELLENVILLE, NY	APR 1995
CHESAPEAKE BAY OYSTER RECOVERY, MD	MAR 1996
JOHNSTOWN (MAJOR REHABILITATION), PA	NOV 1995
BW & T, VICINITY OF JACKSON, AL	JAN 1997
MANATEE HARBOR, FL	MAR 1995
MARTIN COUNTY, FL	JUN 1995
FORT FISHER AND VICINITY, NC	MAR 1995
MYRTLE BEACH, SC	MAR 1995
CAROLINA BEACH AND VICINITY, NC	MAR 1995
RIO DE LA PLATA, PR	APR 1995
MAALAEA HARBOR, MAUI, HI	MAY 1995

UNSTARTED CONSTRUCTION PROJECTS
WITH ACTUAL OR SCHEDULED EXECUTION DATES OF AGREEMENTS

Mr. MYERS. Please provide a list of all projects for which construction funds have been provided in the past but for which construction has not actually begun. Include with the listing the date the project cooperation agreement was executed; and if one has not been executed, the scheduled date.

General WILLIAMS. Certainly, Mr. Chairman. I will supply, in addition to the list budgeted projects lacking executed project cooperation agreements, a list of other funded projects for which construction has not yet begun.

(The information follows:)

ADDITIONAL PROJECTS WITH CONSTRUCTION NOT STARTED

PROJECT NAME	PCA EXECUTION DATE	SCHEDULED PCA EXECUTION DATE
FT YATES BRIDGE,ND		OCT 1995
THURMON TO HAMBURG, IA		APR 1995
KAWAIHAE SMALL BOAT HARBOR, HI		APR 1995
SANDY HOOK TO BARNEGAT (ASBURY PARK TO MANASQUAN), NJ		OCT 1995
EAST ROCKAWAY INLET TO ROCKAWAY INLET, NY		APR 1995
FIRE ISLAND INLET TO MONTAUK PT., NY		JUL 1995
NEW YORK HARBOR COLLECTION AND REMOVAL OF DRIFT, NY & NJ		MAR 1996
MOOREFIELD, WV	MAY 1994	
PETERSBURG, WV	JUL 1993	
ANACOSTIA, MD		MAR 1995
HACKENSACK MEADOWLANDS, NJ		UNSCHED
RICHMOND FILTRATION PLANT, VA	OCT 1994	
ONONDAGA LAKE, NY		UNSCHED
CASINO BEACH, IL		APR 1995
CEDAR RIVER HARBOR, MI		
SAYLORVILLE LAKE (ROADS), IA		UNSCHED
SILVER BAY HARBOR, MN		DEC 1995
STILLWATER, MN		DEC 1995
SALYERSVILLE, KY		MAR 1995
SOUTH CENTRAL PENNSYLVANNIA, PA		MAR 1995
SOUTHERN WEST VIRGINIA, WV		APR 1995
L&TF - MIDDLESBOURGH, KY (SECTION 202)		JUN 1995
L&TF - WILLIAMSBURG, KY (SECTION 202)		MAR 1995
L&TF - UPPER MINGO COUNTY, WV (SECTION 202)		JUN 1995
YOLO BASIN WETLANDS, CA - CAUSEWAY SITE		MAR 1995
BETHEL BANK STABILIZATION, AK	MAR 1994	
CHEHALIS RIVER AT SOUTH ABERDEEN & COSMOPOLIS, WA	MAR 1994	
DILLINGHAM, AK		NOV 1995
ST GEORGE HARBOR, AK		NOV 1995
ALAMOSA, CO	JAN 1995	
ACEQUIAS IRRIGATION SYSTEM, NM		JUL 1995
AUGUSTA TO CLARENDON, LOWER WHITE RIVER, AR		UNSCHED
CACHE RIVER, AR		UNSCHED
CLARENDON LEVEE, LOWER WHITE RIVER, AR		UNSCHED
L'ANGUILLE RIVER BASIN, AR		UNSCHED
TENSAS BASIN, TENSAS RIVER, AR		UNSCHED
TENSAS BASIN, BELOW RED RIVER, AR		UNSCHED
WEST MEMPHIS & VICINITY, AR		UNSCHED
HICKMAN BLUFF, KY		UNSCHED
WEST KENTUCKY TRIBUTARIES, KY		UNSCHED
YAZOO BASIN, ROCKY BAYOU, MS		UNSCHED
YAZOO BASIN, YAZOO BACKWATER PUMPING PLANT, MS		UNSCHED
BEALS CREEK, BIG SPRING, TX	MAR 1994	
CHANNEL TO VICTORIA, TX	NOV 1994	
FRY CREEK, BIXBY, OK	JAN 1995	
MCGRATH CREEK, WICHITA FALLS, TX	NOV 1994	
C&SF, SOUTH DADE COUNTY, FL	JAN 1995	
FORT PIERCE HARBOR, FL	OCT 1994	
HAMLET CITY LAKE, NC		DEC 1995
RIO PUERTO NUEVO, PR	MAR 1994	
SOWASHEE CREEK (RECREATION), MS		UNSCHED
AIWW BRIDGES - HOBUCKEN, NC	DEC 1993	

PROJECT COMPLETIONS

Mr. MYERS. Include in the record a list of all preconstruction engineering and design and construction projects scheduled to be completed in fiscal year 1995 and fiscal year 1996.

General WILLIAMS. Yes, sir.

(The information follows:)

PRECONSTRUCTION ENGINEERING AND DESIGN PROJECTS SCHEDULED TO BE COMPLETED WITH FUNDS IN THE FISCAL YEAR 1995 APPROPRIATIONS

Flood Control:

1. Carneros Creek, CA
2. Los Angeles County Drainage Area, CA
3. West Sacramento, CA
4. Arkansas City, KS
5. River Des Peres, MO
6. Glen Foerd, PA

Navigation:

1. Los Angeles - Long Beach Harbors, CA
2. Palm Valley Bridge, FL
3. McAlpine Locks and Dam, IN and KY
4. Coos Bay, OR
5. Locks and Dams 2, 3, and 4, Monongahela River, PA
6. San Juan Harbor, PR

Beach Erosion

1. Martin County, FL
2. Nassau County, FL
3. Chicago Shoreline, IL

PRECONSTRUCTION ENGINEERING AND DESIGN PROJECTS SCHEDULED TO BE COMPLETED WITH FUNDS IN THE FISCAL YEAR 1996 BUDGET

Flood Control:

1. Napa River, CA
2. San Lorenzo River, CA
3. San Rafael Canal, CA
4. Washington, DC and Vicinity
5. Indianapolis Central Waterfront, IN
6. St Joseph River, South Bend, IN

PRECONSTRUCTION ENGINEERING AND DESIGN PROJECTS SCHEDULED TO BE COMPLETED WITH FUNDS IN THE FISCAL YEAR 1996 BUDGET (CONTINUED)

Flood Control (Continued):

7. Winfield, KS
8. Metropolitan Louisville, Pond Creek, KY
9. Comite River, LA
10. Lower Saddle River, Bergen County, NJ
11. Las Cruces, El Paso and Vicinity, NM
12. Metropolitan Region of Cincinnati, Duck Creek, OH, KY, & IN
13. Chartiers Creek, PA
14. Rio Grande De Loiza, PR
15. Upper Jordon River, UT

Navigation:

1. Chignik Harbor, AK
2. Kane Harbor, AK
3. Noyo River and Harbor (Breakwater), CA
4. Port of Long Beach (Deepening), CA
5. Santa Barbara Harbor, CA
6. Santa Monica Breakwater, CA
7. Hillsboro Inlet, FL
8. Panama City Harbor, FL
9. Port Fourchon, LA
10. Boston Harbor, MA
11. Wilmington Harbor, Channel Widening, NC
12. AIWW at Great Bridge, VA
13. Marmet Locks and Dam, WV

Beach Erosion:

1. Panama City Beaches, FL
2. Sandbridge, Virginia Beach, VA

CONTINUING CONSTRUCTION PROJECTS SCHEDULED TO BE COMPLETED WITH FUNDS IN THE FISCAL YEAR 1995 APPROPRIATIONS

Flood Control

1. Bethel Bank Stabilization, AK
2. Basset Creek, MN
3. Rochester, MN
4. Brush Creek, Kansas City, MO
5. Lake Wichita, Holliday Creek at Wichita Falls, TX

Navigation

1. Canaveral Harbor, FL
2. Canaveral Harbor Deepening, FL
3. Grays Landing, Lock and Dam 7, Monongahela River, PA
4. Savannah Harbor Deepening, GA

CONTINUING CONSTRUCTIOM PROJECTS SCHEDULED TO BE COMPLETE WITH FUNDS IN THE FISCAL YEAR 1995 APPROPRIATIONS (CONTINUED)

Dam Safety Assurance

1. Beaver Lake, AR (Dam Safety)
2. Mud Mountain Dam, WA (Dam Safety)

Major Rehabilitation

1. GIWW - Brazos River Floodgates, TX (Major Rehab)

CONTINUING CONSTRUCTION PROJECTS SCHEDULED TO BE COMPLETED WITH FUNDS IN THE FISCAL YEAR 1996 BUDGET

Flood Control:

1. Holbrook, AZ
2. Sacramento River Flood Control Project, CA (Def. Corr.)
3. Wildcat and San Pablo Creeks, CA
4. Frankfort, South Frankfort, KY
5. North Ellenville, NY (Def. Corr.)
6. Turtle Creek, PA
7. Beals Creek, Big Spring, TX
8. San Antonio Channel Improvements, TX

Navigation:

1. Kodiak Harbor, Ak
2. Morro Bay Harbor, CA
3. Sonoma Bay Wetlands Demonstration Project, CA
4. Fort Pierce Harbor, FL
5. Salem River, NJ

Beach Erosion:

1. Fort Fisher, NC

Dam Safety Assurance:

1. Center Hill Dam, TN (Dam Safety)
2. Sam Rayburn Dam and Reservoir, TX (Dam Safety)
3. Howard Hanson Dam, WA (Dam Safety)

Environmental Restoration:

1. Yolo Basin Wetlands, Sacramento River, CA

Major Rehabilitation:

1. Four Locks, Illinois Waterway, IL (Major Rehab)

OPERATION AND MAINTENANCE OF RECREATION FACILITIES

Mr. MYERS. How much is in the Operation and Maintenance budget request for construction, operation, and maintenance of recreational facilities?

General WILLIAMS. Other than the $5 million remaining items initiative titled: "Reinvested User Fees for Recreation Improvements," there is no money in the O&M budget request for construction of recreational facilities. There is $130 million in the O&M request for operations and $68 million for maintenance of recreational facilities.

Mr. MYERS. Of the total, how much will be derived from the Corps' special account in the Treasury?

General WILLIAMS. We estimate $30 million will be derived from the Corps Special Recreation Use Fees account in the Treasury.

Mr. MYERS. How many recreation areas does the Corps operate?

General WILLIAMS. The Corps operated 2507 recreation areas in 1994.

Mr. MYERS. How many Corps constructed recreation areas have been turned over to local interests for operation and maintenance?

General WILLIAMS. Of the 4,329 recreation areas located on Corps administered lands, 1822 are managed by other entities, such as other Federal agencies, states, local governmental entities, private entities, and commercial concessions. Local governmental interests manage 593 recreation areas, of which 493 contain Corps constructed recreation facilities.

Mr. MYERS. Assuming willing partners could be found, is there any reason why all recreation areas couldn't be turned over to local interests?

General WILLIAMS. No, Mr Chairman. All areas could feasibly be turned over.

Mr. MYERS. How much will be expended in fiscal year 1995 on construction, operation and maintenance of recreational facilities?

General WILLIAMS. No O&M funds will be expended on construction of recreation facilities in 1995. We expect expenditures for operations of recreational facilities to be $125 million and expenditures for their maintenance to be $54 million.

COMMERCE AT NAVIGATION PROJECTS IN FY 1996 BUDGET

Mr. MYERS. Please provide for the record the commerce moving through each navigation project for which operation and maintenance funds have been requested in fiscal year 1996?

General WILLIAMS. Mr. Chairman, the listing which reflects all traffic reported in the Waterborne Commerce Statistics report, follows. Commercial fishing, cruise ships, offshore operations and charter activities are not reported in this database.

(The information follows:)

COMMERCE TRANSITING NAVIGATION PROJECTS INCLUDED IN THE FY 1996 O&M BUDGET

State	PROJET	FY 1996 BUDGET ($000)	COMMERCIAL TRAFFIC (Thousand Tons)
AL	ALABAMA - COOSA RIVER, AL	5,668	1,777
AL	BAYOU CODEN,	231	1
AL	BAYOU LA BATRE	455	10
AL	BLACK WARRIOR AND TOMBIGBEE RIVERS, AL	16,820	23,194
AL	BON SECOUR RIVER	551	8
AL	DAUPHIN ISLAND BAY	252	2
AL	DOG AND FOWL RIVERS	505	1
AL	FLY CREEK	249	1
AL	GULF INTRACOASTAL WATERWAY (MOBILE DISTRICT), AL	3,172	51,009
AL	MOBILE HARBOR, AL	17,780	40,482
AL	PERDIDO PASS CHANNEL	350	1
AK	ANCHORAGE HARBOR, AK	1,380	2,309
AK	DILLINGHAM SMALL BOAT HARBOR, AK	599	14
AK	HOMER SMALL BOAT HARBOR, AK	265	82
AK	NINILCHIK HARBOR, AK	182	0
AK	NOME HARBOR, AK	305	31
AK	THOMAS BASIN (KETCHIKAN), AK	564	1,568
AR	HELENA HARBOR (MR & T) ES410	500	1,343
AR	MCCLELLAN - KERR ARKANSAS RIVER NAVIGATION SYSTEM, AR & OK	20,479	47,738
AR	OSCEOLA HARBOR, AR	453	250
AR	WHITE RIVER, AR	2,200	673
AR	YELLOW BEND PORT, AR	142	150
CA	CHANNEL ISLANDS HARBOR, CA	890	0
CA	HUMBOLDT HARBOR AND BAY, CA	4,670	1,322
CA	MORRO BAY HARBOR, CA	2,580	0
CA	MOSS LANDING HARBOR, CA	845	0
CA	OAKLAND HARBOR, CA	2,205	13,151
CA	OCEANSIDE HARBOR, CA	1,045	18
CA	PETALUMA RIVER, CA	1,690	315
CA	PORT HUENEME, CA	135	696
CA	REDWOOD CITY, CA	2,600	816
CA	RICHMOND HARBOR, CA	6,481	20,846
CA	SACRAMENTO RIVER - 30' CHANNEL, CA	457	1,160
CA	SACRAMENTO RIVER - SHALLOW DRAFT CHANNEL, CA	117	0
CA	SACRAMENTO RIVER AND TRIBUTARIES (DEBRIS CONTROL), CA	872	0
CA	SAN DIEGO HARBOR CA	1,085	1,294
CA	SAN FRANCISCO HARBOR, CA	1,825	67,187
CA	SAN JOAQUIN RIVER, CA	1,659	2,765
CA	SAN PABLO BAY AND MARE ISLAND STRAIT, CA	1,080	36,073
CA	SANTA BARBARA HARBOR, CA	1,038	11
CA	SUISUN BAY CHANNEL, CA	665	6,340
CA	VENTURA MARINA, CA	2,288	0
CA	YUBA RIVER, CA	30	0
CT	STONEY CREEK	412	0
DE	C&D CANAL - ST. GEORGES BRIDGE REPLACEMENT	14,000	0
DE	INTRACOASTAL WATERWAY, DELAWARE R TO CHESAPEAKE BAY, DE & MD	16,090	13,612
DE	MURDERKILL RIVER, DE	40	0
DE	WILMINGTON HARBOR, DE	2,513	3,826
DC	WASHINGTON HARBOR, DC	35	559
FL	AIWW, NORFOLK TO ST. JOHNS RIVER	75	545
FL	APALACHIACOLA BAY, FL	187	1
FL	CANAVERAL HARBOR, FL	4,736	2,968
FL	CHARLOTTE HARBOR, FL	3,275	943
FL	EAST PASS CHANNEL	886	1
FL	FERNANDINA HARBOR, FL	1,623	406

COMMERCE TRANSITING NAVIGATION PROJECTS INCLUDED IN THE FY 1996 O&M BUDGET

State	PROJET	FY 1996 BUDGET ($000)	COMMERCIAL TRAFFIC (Thousand Tons)
FL	FORT PIERCE HARBOR, FL	712	210
FL	INTRACOASTAL WATERWAY, CALOOSAHATCHEE R. TO ANCLOTE R., FL	221	803
FL	INTRACOASTAL WATERWAY, JACKSONVILLE TO MIAMI, FL	3,293	537
FL	JACKSONVILLE HARBOR, FL	4,119	17,208
FL	JOHNS PASS, FL	400	1
FL	MIAMI HARBOR, FL	295	6,451
FL	NEW PASS, FL	1,086	110
FL	OKEECHOBEE WATERWAY, FL	3,933	680
FL	OKLAWAHA RIVER, FL	127	1
FL	PALM BEACH HARBOR, FL	1,459	2,646
FL	PANAMA CITY HARBOR, FL	717	2,734
FL	PONCE DE LEON INLET, FL	2,147	1
FL	PORT ST. JOE HARBOR, FL	72	43
FL	ST. AUGUSTINE HARBOR, FL	4	6
FL	ST. LUCIE INLET, FL	85	1
FL	TAMPA HARBOR, FL	3,744	46,434
FL	WITHLACOOCHIE RIVER	34	1
GA	APALACHICOLA CHATTAHOOCHEE & FLINT RIVERS, GA, AL & FL	4,321	620
GA	ATLANTIC INTRACOASTAL WATERWAY (SAVANNAH DISTRICT), GA	1,916	404
GA	BRUNSWICK HARBOR, GA	3,411	1,450
GA	SAVANNAH HARBOR, GA	8,377	13,989
GA	SAVANNAH RIVER BELOW AUGUSTA, GA	2,475	1
HI	BARBER'S POINT HARBOR, HI	143	9,357
IL	ANDALUSIA HARBOR, IL	71	0
IL	CALUMET HARBOR AND RIVER, IL	500	11,765
IL	CHICAGO HARBOR, IL	2,545	1,350
IL	CHICAGO RIVER, IL	610	1,337
IL	ILLINOIS AND MISSISSIPPI CANAL, IL	465	0
IL	ILLINOIS WATERWAY, IL & IN	20,844	72,455
IL	ILLINOIS WATERWAY, IL (LMVD PORTION)	1,440	42,600
IL	KASKASKIA RIVER NAVIGATION, IL	1,717	3,006
IL	LAKE MICHIGAN DIVERSION	645	0
IL	MISS R. BETWEENN MISSOURI R. & MINNEAPOLIS, IL, MN, WI & IA	38,749	35,928
IL	MISSISSIPPI RIVER BETWEEN OHIO RIVER & MISSOURI, IL	18,858	114,499
IL	MISS. RVR BETWN MISSOURI RVR & MPLS, IL & MN (LMVD PORTION)	12,437	86,183
IL	ROCK ISLAND SMALL BOAT HARBOR, IL	123	0
IL	WAUKEGAN HARBOR, IL	970	520
IN	BURNS WATERWAY HARBOR, IN	1,545	8,756
IN	BURNS WATERWAY SMALL BOAT HARBOR, IN	95	0
IN	INDIANA HARBOR, IN	320	15,326
IN	MICHIGAN CITY HARBOR, IN	540	0
IA	MISSOURI RIVER - SIOUX CITY TO MOUTH, IA, NE, KS & MO	4,244	11,153
IA	MISSOURI RIVER SIOUX CITY, IA TO RULO, NE	1,824	1,331
KY	BIG SANDY HARBOR, KY	1,035	23,471
KY	GREEN & BARREN RIVERS, KY	1,378	7,801
KY	HICKMAN HARBOR, KY (Elvis Stahr Harbor -- Port of Hickman)	400	285
KY	KENTUCKY RIVER, KY	1,059	307
KY	LICKING RIVER OPEN CHANNEL WORK, KY	30	1,126
LA	ATCHAFALAYA RIVER & BAYOUS CHENE, BOEUF & BLACK, LA	12,786	10,279
LA	BARATARIA BAY WATERWAY, LA	921	1,873
LA	BAYOU LAFOURCHE AND LAFOURCHE-JUMP WATERWAY, LA	10	2,214
LA	BAYOU TECHE, LA	727	1,088
LA	CALCASIEU RIVER & PASS, LA	4,095	45,436
LA	FRESHWATER BAYOU, LA	1,659	6,026
LA	GULF INTRACOASTAL WATERWAY, LA & TX SECTION	16,110	65,346

COMMERCE TRANSITING NAVIGATION PROJECTS INCLUDED IN THE FY 1996 O&M BUDGET

State	PROJET	FY 1996 BUDGET ($000)	COMMERCIAL TRAFFIC (Thousand Tons)
LA	HOUMA NAV CANAL, LA	3,897	793
LA	LAKE PROVIDENCE HARBOR LA	292	489
LA	MADISON PARISH PORT, LA	37	140
LA	MERMENTAU RIVER, LA	2,081	760
LA	MISS RIVER - BR TO GULF, LA	51,837	426,342
LA	MISSISSIPPI RIVER - GULF OUTLET, LA	12,054	7,160
LA	MISSISSIPPI RIVER OUTLETS AT VENICE, LA	1,645	1,600
LA	OUACHITA AND BLACK RIVERS, AR & LA	5,304	1,089
LA	PEARL RIVER, LA	280	0
LA	RED RIVER WATERWAY - MISSISSIPPI RIVER TO SHREVEPORT, LA	9,714	3,048
LA	TANGIPAHOA	100	0
ME	CRIEHAVEN HARBOR	293	0
MD	BALTIMORE HARBOR & CHANNELS 50 FT, MD	13,425	37,656
MD	BROAD CREEK MARYLAND	360	4
MD	CHESTER RIVER, MD	660	103
MD	CRISFIELD HARBOR, MD	65	4
MD	FISHING BAY, MD	70	2
MD	HERRING CREEK TALL TIMBERS, MD	40	0
MD	KNAPPS NARROWS	782	0
MD	NANTICOKE RIVER NORTHWEST FORK, MD	260	339
MD	OCEAN CITY HARBOR & INLET & SINEPUXENT BAY, MD	125	12
MD	TWITCH COVE AND BIG THOROFARE RIVER MD	150	1
MD	WICOMICO RIVER, MD	615	964
MA	CAPE COD CANAL, MA	8,087	13,600
MA	GREEN HARBOR	364	1
MA	NEWBURYPORT HARBOR MA	646	0
MA	SCITUATE HARBOR	208	0
MA	SESUIT HARBOR	217	0
MA	WELLFLEET HARBOR	1,214	0
MI	ALPENA HARBOR MI	218	2,486
MI	ARCADIA HARBOR, MI	77	0
MI	BOLLES HARBOR MI	29	0
MI	CHANNELS IN LAKE ST. CLAIR, MI	245	58,131
MI	CHARLEVOIX HARBOR, MI	118	1,353
MI	DETROIT RIVER, MI	4,729	63,134
MI	EAGLE HARBOR MICHIGAN	60	0
MI	FRANKFORT HARBOR, MI	372	77
MI	GRAND HAVEN HARBOR, MI	739	679
MI	GRAND HAVEN HARBOR, MI - MITIGATION OF SHORE DAMAGE	78	0
MI	GRAND MARAIS MICHIGAN	218	0
MI	GRAND TRAVERSE BAY HARBOR, MI	123	0
MI	GRELICKVILLE MI	63	0
MI	HARBOR BEACH HARBOR,MI	77	308
MI	HOLLAND HARBOR, MI	358	316
MI	HOLLAND HARBOR, MI - MITIGATION OF SHORE DAMAGE	59	0
MI	INLAND ROUTE, MI	31	0
MI	KEWEENAW WATERWAY, MI	1,641	91
MI	LELAND HARBOR, MI	280	0
MI	LEXINGTON HARBOR, MI	147	0
MI	LEXINGTON HARBOR, MI - MITIGATION OF SHORE DAMAGE	77	0
MI	LITTLE LAKE HARBOR, MI	136	0
MI	LUDINGTON HARBOR, MI	495	846
MI	MANISTEE HARBOR, MI	440	456
MI	MENOMINEE HARBOR, MI & WI	32	130
MI	MONROE HARBOR, MI	772	1,778

COMMERCE TRANSITING NAVIGATION PROJECTS INCLUDED IN THE FY 1996 O&M BUDGET

State	PROJET	FY 1996 BUDGET ($000)	COMMERCIAL TRAFFIC (Thousand Tons)
MI	MUSKEGON HARBOR - MITIGATION OF SHORE DAMAGE	111	0
MI	MUSKEGON HARBOR, MI	694	1,562
MI	ONTONAGON HARBOR, MI	455	244
MI	PENTWATER HARBOR, MI	799	0
MI	PORT AUSTIN HARBOR MICHIGAN	188	0
MI	PORT SANILAC HARBOR, MI	185	0
MI	PORT SANILAC HARBOR, MI - MITIGATION OF SHORE DAMAGE	75	0
MI	PORTAGE LAKE HARBOR, MI	103	0
MI	PTE LOOKOUT HARBOR MICHIGAN	301	0
MI	ROUGE RIVER, MI	297	7,192
MI	SAGINAW RIVER, MI	1,802	3,789
MI	SAUGATUCK HARBOR MICHIGAN	918	0
MI	ST. CLAIR RIVER, MI	868	68,613
MI	ST. JOSEPH HARBOR, MI	495	543
MI	ST. JOSEPH HARBOR, MI - MITIGATION OF SHORE DAMAGE	585	0
MI	WHITE LAKE HARBOR, MI	434	0
MN	DULUTH - SUPERIOR HARBOR, MN & WI	3,396	39,304
MN	MINNESOTA RIVER, MN	145	3,194
MN	MISSISSIPPI R. BETWEEN MISSOURI AND MPLS, MN (MAJ. REHAB)	4,954	0
MN	MISSISSIPPI R. BETWEEN MISSOURI & MPLS, MN	29,644	15,048
MN	RESERVOIRS AT HEADWATERS OF MISSISSIPPI RIVER, MN	3,515	0
MS	BILOXI HARBOR, MS	461	1,897
MS	CLAIBORNE COUNTY PORT, MS	153	150
MS	GULFPORT HARBOR, MS	2,876	1,249
MS	MOUTH OF YAZOO RIVER, MS	113	2,264
MS	PASCAGOULA HARBOR, MS	2,998	27,020
MS	ROSEDALE HARBOR, MS	410	538
MS	TENNESSEE-TOMBIGBEE WATERWAY, AL & MS	21,090	7,133
MS	YAZOO RIVER, MS	3	623
MO	CARUTHERSVILLE HARBOR, MO	300	396
MO	NEW MADRID HARBOR, MO.	300	700
MO	SOUTHEAST MO PORT, MS R, MO	150	337
NJ	BARNEGAT INLET, NJ	1,455	1
NJ	CHEESEQUAKE CREEK NJ	2,590	0
NJ	COLD SPRING INLET, NJ	485	78
NJ	DELAWARE RIVER - PHILADELPHIA TO THE SEA, PA, NJ & DE	18,157	118,438
NJ	DELAWARE RIVER AT CAMDEN	850	4,855
NJ	DELAWARE RIVER, PHILADELPHIA, PA TO TRENTON, NJ	1,255	5,648
NJ	NEW JERSEY IWW, NJ	3,729	89
NJ	SALEM RIVER	410	72
NJ	SHARK RIVER	1,190	0
NJ	TOMS RIVER	290	0
NY	BAYRIDGE & RED HOOK CHANNELS, NY	230	2,977
NY	BLACK ROCK CHANNEL AND TONAWANDA HARBOR, NY	3,205	681
NY	BROWNS CREEK	500	4
NY	BUFFALO HARBOR, NY	455	1,657
NY	BUTTERMILK CHANNEL, NY	820	26,089
NY	DUNKIRK HARBOR	309	250
NY	EAST RIVER	195	28,778
NY	EAST ROCKAWAY INLET, NY	930	962
NY	FIRE ISLAND TO JONES INLET, NY	1,668	0
NY	GLEN COVE CREEK, NY	130	109
NY	GREAT SODAS BAY HBR, NY	10	0
NY	HUDSON RIVER CHANNEL	1,380	16,616
NY	HUDSON RIVER, NY	1,375	15,468

COMMERCE TRANSITING NAVIGATION PROJECTS INCLUDED IN THE FY 1996 O&M BUDGET

State	PROJET	FY 1996 BUDGET ($000)	COMMERCIAL TRAFFIC (Thousand Tons)
NY	HUDSON RIVER, NY (O&C)	1,145	102
NY	IRONDEQUOIT BAY HARBOR	160	0
NY	JAMAICA BAY	220	1,025
NY	JONES INLET, NY	3,880	4
NY	LAKE MONTAUK HARBOR, NY	1,930	0
NY	LITTLE SODUS BAY HARBOR	1,560	0
NY	MATTITUCK HARBOR	570	0
NY	NARROWS OF LAKE CHAMPLAIN, NY	645	87
NY	NEW YORK HARBOR, NY	6,020	115,311
NY	NEW YORK & NEW JERSEY CHANNELS, NY	205	80,177
NY	OAK ORCHARD HARBOR	10	0
NY	OLCOTT HARBOR	10	0
NY	OSWEGO HARBOR, NY	496	581
NY	ROCHESTER HARBOR	0	505
NY	SHINNECOCK INLET	200	0
NY	WILSON HARBOR	10	0
NC	ATLANTIC INTRACOASTAL WATERWAY (WILMINGTON DISTRICT), NC	5,097	2,208
NC	BEAUFORT HARBOR, NC	350	50
NC	BELHAVEN HARBOR NC	415	8
NC	BOGUE INLET AND CHANNEL, NC	655	1
NC	CAPE FEAR RIVER ABOVE WILMINGTON, NC	1,200	458
NC	CAROLINA BEACH INLET, NC	852	2
NC	LOCKWOODS FOLLY RIVER, NC	857	11
NC	MANTEO (SHALLOWBAG) BAY, NC	6,506	31
NC	MASONBORO INLET AND CONNECTING CHANNELS NC	4,650	2
NC	MOREHEAD CITY HARBOR, NC	3,108	4,400
NC	NEW RIVER INLET, NC	1,595	3
NC	NEW TOPSAIL INLET AND CONNECTING CHANNELS, NC	840	1
NC	PAMLICO AND TAR RIVERS NC	125	1,699
NC	ROANOKE RIVER VA	125	191
NC	SILVER LAKE HARBOR, NC	200	7
NC	WILMINGTON HARBOR, NC	6,048	7,047
OH	ASHTABULA HARBOR, OH	1,088	10,572
OH	CLEVELAND HARBOR, OH	13,038	13,654
OH	CONNEAUT HARBOR, OH	655	6,540
OH	FAIRPORT HARBOR	0	2,163
OH	HURON HARBOR, OH	820	618
OH	LORAIN HARBOR, OH	407	13,282
OH	PORTSMOUTH HARBOR	75	0
OH	ROCKY RIVER OH	12	0
OH	SANDUSKY HARBOR, OH	1,030	5,179
OH	TOLEDO HARBOR, OH	3,502	12,722
OH	VERMILION HARBOR	10	0
OK	MCCLELLAN-KERR ARKANSAS RIVER NAVIGATION SYSTEM, OK	4,769	23,016
OR	CHETCO RIVER, OR	500	5
OR	COLUMBIA RIVER AT MOUTH, OR & WA	8,013	37,000
OR	COLUMBIA RIVER BETWEEN VANCOUVER, WA & THE DALLES, OR	420	10
OR	COOS BAY, OR	4,349	5,700
OR	COQUILLE RIVER, OR	454	1
OR	C&LW RIVERS BELOW VANCOUVER, WA & PORTLAND, OR	11,017	33,167
OR	DEPOE BAY, OR	3	1
OR	PORT ORFORD, OR	425	4
OR	ROGUE RIVER AT GOLD BEACH, OR	816	1
OR	SIUSLAW RIVER, OR	864	184
OR	SKIPANON CHANNEL, OR	61	760

COMMERCE TRANSITING NAVIGATION PROJECTS INCLUDED IN THE FY 1996 O&M BUDGET

State	PROJET	FY 1996 BUDGET ($000)	COMMERCIAL TRAFFIC (Thousand Tons)
OR	TILLAMOOK BAY AND BAR, OR	43	21
OR	UMPQUA RIVER, OR	1,094	45
OR	WILLAMETTE RIVER AT WILLAMETTE FALLS, OR	846	1,575
OR	YAQUINA BAY & HARBOR, OR	1,565	504
PA	ALLEGHENY RIVER, PA	12,736	3,069
PA	ERIE HARBOR, PA	468	1,247
PA	MONONGAHELA RIVER, PA	16,586	33
PA	SCHUYLKILL RIVER, PA	1,930	8,167
PR	SAN JUAN HARBOR, PR	10	13,874
SC	ATLANTIC INTRACOASTAL WATERWAY (CHARLESTON DISTRICT), SC	2,420	268
SC	CHARLESTON HARBOR, SC	5,426	9,650
SC	COOPER RIVER, CHARLESTON HARBOR, SC	2,469	2/
SC	FOLLY RIVER, SC	386	1
SC	GEORGETOWN HARBOR, SC	3,509	955
SC	LITTLE RIVER INLET, SC & NC	64	1
SC	MURRELLS INLET, SC	65	1
SC	PORT ROYAL HARBOR, SC	1,192	54
SC	SHIPYARD RIVER, SC	428	1,335
SC	TOWN CREEK, SC	491	1
TN	TENNESSEE RIVER, TN	13,637	48,161
TN	WOLF RIVER HARBOR, TN	650	1,697
TX	BRAZOS ISLAND HARBOR, TX	1,038	2,165
TX	CHANNEL TO PORT MANSFIELD, TX	1,510	4
TX	CHANNEL TO VICTORIA - GIWW, TX	1,595	3,937
TX	CORPUS CHRISTI SHIP CHANNEL, TX	2,190	59,636
TX	FREEPORT HARBOR, TX	2,870	14,025
TX	GALVESTON HARBOR AND CHANNEL, TX	136	9,755
TX	GULF INTRACOASTAL WATERWAY, TX	17,805	47,991
TX	HOUSTON SHIP CHANNEL, TX	5,823	141,477
TX	MATAGORDA SHIP CHANNEL, TX	5,145	5,893
TX	MOUTH OF THE COLORADO RIVER, TX	1,780	101
TX	SABINE-NECHES WATERWAY, TX	11,946	95,191
TX	TEXAS CITY CHANNEL, TX	1,525	53,653
TX	TRINITY RIVER & TRIBUTARIES, TX	1,270	0
VA	ATLANTIC INTRACOASTAL WATERWAY - DSC , VA	1,437	922
VA	ATLANTIC INTRACOASTAL WATERWAY, VA	1,732	1,151
VA	CHANNEL TO NEWPORT NEWS, VA	590	30,102
VA	CHINCOTEAGUE BAY CHANNEL	42	0
VA	CHINCOTEAGUE HARBOR OF REFUGE	36	0
VA	CHINCOTEAGUE INLET, VA	888	25
VA	CRANES CREEK , VIRGINIA	321	0
VA	DEEP CREEK , VA	597	1
VA	HOSKINS CREEK, VA	395	0
VA	JAMES RIVER NAVIGATION, VA	1,616	9,833
VA	NORFOLK HARBOR AND CHANNELS, VA	5,131	44,503
VA	QUEENS CREEK , MATHEWS CO., VIRGINIA	337	0
VA	RUDEE INLET VIRGINIA	570	0
VA	STARLINGS CREEK, VA	389	0
VA	TANGIER CHANNEL, VA	467	15
VA	THIMBLE SHOAL CHANNEL, VA	1,355	73,310
VA	TYLERS BEACH , VIRGINIA	34	0
VA	WATERWAY ON THE COAST OF VIRGINIA, VA	1,268	50,000
WA	COLUMBIA RIVER AT BAKER BAY, WA & OR	26	9
WA	COLUMBIA RIVER BETWEEN CHINOOK & SAND ISLAND, WA	7	0
WA	EVERETT HARBOR AND SNOHOMISH RIVER, WA	870	1,758

COMMERCE TRANSITING NAVIGATION PROJECTS INCLUDED IN THE FY 1996 O&M BUDGET

State	PROJET	FY 1996 BUDGET ($000)	COMMERCIAL TRAFFIC (Thousand Tons)
WA	GRAYS HARBOR AND CHEHALIS RIVER, WA	10,655	4,487
WA	KENMORE NAVIGATION CHANNEL	202	167
WA	LAKE WASHINGTON SHIP CANAL, WA	6,877	223
WA	OLYMPIA HARBOR	12	945
WA	PUGET SOUND AND TRIBUTARY WATERS, WA	1,155	13,900
WA	QUILLAYUTE RIVER, WA	2,250	2,250
WA	SEATTLE HARBOR, WA	678	13,924
WA	WILLAPA RIVER AND HARBOR, WA	431	184
WV	ELK RIVER HARBOR, WV	3	809
WV	KANAWHA RIVER LOCKS AND DAMS, WV	11,376	22,318
WV	OHIO RIVER LOCKS AND DAMS KY, IL, IN, OH, PA & WV	53,568	280,158
WV	OHIO RIVER OPEN CHANNEL WORK, KY, IL, IN, OH, PA & WV	6,025	0
WV	TYGART LAKE, WV	1,615	33
WI	ALGOMA HARBOR	117	0
WI	CORNUCOPIA HARBOR WI	107	0
WI	FOX RIVER, WI	2,215	0
WI	GREEN BAY HARBOR, WI	1,029	2,431
WI	KENOSHA HARBOR, WI	130	0
WI	KEWAUNEE HARBOR, WI	300	80
WI	MANITOWOC HARBOR, WI	257	274
WI	MILWAUKEE HARBOR, WI	3,123	2,153
WI	SHEBOYGAN HARBOR, WI	883	42
WI	STURGEON BAY, WI	2,831	114
WI	TWO RIVERS HARBOR, WI	760	0

NOTES:

1/ Ohio River Open Channel Flow is combined with Ohio River Locks and Dams

2/ Cooper River, Charleston Harbor is included in Charleston Harbor traffic.

Mr. Myers. Please provide for the record the actual unobligated balances remaining at the end of fiscal year 1994 for each of your appropriation accounts. What are your current estimates of unobligated balances at the end of fiscal year 1995?

Of those totals, how much has been earmarked in law for a particular project? Please provide a listing of those projects along with an indication of how much of the unobligated funds will be utilized in fiscal year 1996.
We recognize that some amount of unobligated carryover is desirable in order to permit you to have flexibility in executing your program. What level of unobligated carryover would you consider ideal for each account?
General Williams. Yes, sir. The tables that follow will provide the requested information.

(The information follows)

UNOBLIGATED BALANCES
(Dollars in millions)

ACCOUNT	30 SEPT 94	30 SEPT 95	DESIRED LEVEL
General Investigations	60.8	58.3	20.0
Construction, General	542.6	480.2	200.0
Operation and Maintenance, General	82.8	81.8	50.0
Flood Control, Mississippi River and Tributaries	11.8	10.0	7.0
General Expenses	10.1	2.8	0.0
Regulatory Program	1.2	1.2	1.0
Flood Control and Coastal Emergencies	168.2	4.0	2.0
Oil Spill Research	0.0	0.0	0.0

GENERAL INVESTIGATIONS
STUDIES AND PROJECTS
WITH FUNDS EARMARKED IN LAW
($000)

STUDY OR PROJECT NAME	FY REC'D	ACT AMT.	ACTUAL AMOUNT UNOBLIG. AS OF 30SEP94	EST. AMOUNT UNOBLIG. AS OF 30SEP95	EST. AMOUNT SCHD TO BE OBLIG. IN FY96
RED RIVER NAVIGATION STUDY SW ARKANSAS, AR	95	300	–	31	31
CALLEGUAS CREEK, CA	93	320	271	271	271
CENTRAL BSN GROUNDWATER PROJ, WHITTIER NARROWS, CA	94	750	163	0	–
LACDA WATER CONSER & SUP(HANSEN & LOPEZ DAMS),CA	95	250	–	0	–
LACDA WATER CONSER & SUP(WHITTER NARROWS\SANTA FE DAMS),CA	95	250	–	0	–
LOS ANGELES – LONG BEACH, CA FEAS.	91	2,250	2	0	–
LOS ANGELES RIVER WATERCOURSE IMPROVEMENT, CA	93–94	600	530	530	530
NORCO BLUFFS, SANTA ANA RIVER, CA	92–95	975	327	0	–
RANCHOS PALOS VERDES, CA	93–94	480	400	0	–
BISCAYNE BAY, FL	94	700	636	558	558
MONROE COUNTY BEACH EROSION, FL (SMATHERS BEACH)	91&93	693	188	0	–
TAMPA HARBOR, ALAFIA RIVER AND BIG BEND, FL	93–94	460	147	0	–
KAUMALAPAU HARBOR, LANAI, HI	93–94	900	153	0	–
INDIANAPOLIS, WHITE RIVER, CENTRAL WATERFRONT, IN	94&95	7,700	596	997	997
LAKE GEORGE, HOBART, IN	91–95	1,115	530	530	530
LITTLE CALUMET RIVER BASIN (CADY MARSH DITCH), IN	91–95	1,020	526	416	416
OHIO RIVER GREENWAY CORRIDOR, IN	93	502	2	0	–
OHIO RIVER GREENWAY, IN	95	500	–	10	10
OHIO RIVER SHORELINE, IN	94	400	105	0	–
HAZARD, KY	95	500	–	363	363
KENTUCKY LOCK AND DAM, LOCK ADDITION, KY	93–95	4,500	39	102	102
BROCKTON, MA	94	350	136	0	–
MUDDY RIVER, MA	93	250	244	143	143
N. BR POTOMAC RIV COR, ENV REST, WV & MD (JENNING RANDOLPH)	94	400	277	0	–
CLINTON RIVER SPILLWAY, MI	93	50	50	50	0
MISSISSIPPI RIVER, VICINITY OF ST LOUIS, MO	93	500	34	0	0
STE GENEVIEVE, MO	91&93–4	4,550	3,457	1,856	200
ST. LOUIS HARBOR, MO & IL	91–93	1,700	1,399	1,219	497
DEVILS LAKE, ND	93	300	165	0	–
PASSIC RIVER MAINSTEM, NJ	91–94	39,950	9,685	3,785	3,785
BUFFALO SMALL BOAT HARBOR, NY	92	70	17	12	0
BUFFALO, NY	93	440	295	192	192
OLCOTT HARBOR, NY	92	425	274	274	274
ONONDAGA LAKE, NY (SEC 401, PL 101–596)	92–93	1,500	1,144	1,029	650
GENEVA STATE PARK, ASHTABULA COUNTY, OH	94	250	222	141	141
BROAD TOP REGION, PA	94	400	167	0	–
JUNIATA RIVER BASIN, PA	94	450	240	50	50
LACKAWANNA RIVER BASIN, PA – GREENWAY	92&94	1,000	218	218	218
MUSSERS DAM, MIDDLE CREEK, SNYDER CO. PA	95	100	–	0	–
POCOTALIGO RIVER AND SWAMP, SC	94	400	119	0	–
BLACK FOX/OAKLAND SPRGS WETLANDS, MURFREESBORO, TN	93–94	240	4	0	–
HARTSVILLE TROUSDALE COUNTY, TN	95	95	–	0	–

GENERAL INVESTIGATIONS
STUDIES AND PROJECTS
WITH FUNDS EARMARKED IN LAW
($000)

STUDY OR PROJECT NAME	FY REC'D	ACT AMT.	ACTUAL AMOUNT UNOBLIG. AS OF 30SEP94	EST. AMOUNT UNOBLIG. AS OF 30SEP95	EST. AMOUNT SCHD TO BE OBLIG. IN FY96
RED RIVER WW. SHREVEPORT, LA TO DAINGERFIELD, TX	91–93	7,900	1,880	1,767	0
RED RIVER, INDEX, AR TO DENISON DAM, TX	91–92	800	125	125	0
VIRGINIA BEACH, VA (HURRICANE PROTECTION)	94	2,000	1,181	0	–
WALLA WALLA DISTRICT DISPOSITION STUDY, WA	92–93	370	56	0	–
MONONGAHELA RIVER COMPREHENSIVE, WV	94	600	424	21	21
WEST VIRGINIA COMPREHENSIVE, WV	94&95	850	450	735	400
WEST VIRGINIA PORT DEVELOPMENT, WV	95	800	–	750	250
TOTALS		91,905	26,878	16,175	10,629

CONSTRUCTION, GENERAL
ACT LANGUAGE CARRYOVER
(DOLLARS IN THOUSANDS)

NAME	EOY FY 1994 UNOBLIGATED ACTUAL CARRYOVER	EOY FY 1995 UNOBLIGATED SCHEDULED CARRYOVER	FY 1995 CARRYOVER REQUIRED IN FY 1996
ALLENDALE DAM, RI	0	65	0
BEAVER LAKE ENVIRONMENTAL INFRASTRUCTURE, AR	2,990	2,967	0
BETHEL BANK STABILIZATION. AK	8,103	4,503	4,503
BROAD TOP REGION, PA	0	500	500
CAROLINA BEACH AND VICINITY, NC	0	85	85
CASINO BEACH, IL	788	470	470
CENTRAL AND SOUTHERN FLORIDA, FL	10,648	6,124	6,124
CLINTON RIVER SPILLWAY, MI	1,770	1,620	1,620
COLUMBIA RIVER FISH, OR	632	632	0
COLUMBIA RIVER, SEAFARERS MEMORIAL, OR	97	0	0
DES MOINES RVR & GREENBELT, IA	1,420	3,577	3,577
ELK CREEK LAKE, OR	2,453	1,602	300
ENVIRONMENTAL RESTORATION, WV	3,394	0	0
EUFAULA LAKE, OK (BRIDGE REPLACEMT)	89	0	0
FT YATES BRIDGE, ND	1,305	1,255	1,255
HACKENSACK MEADOWLANDS, NJ	0	2,200	2,200
HAMLET CITY LAKE, NC	2,320	2,119	2,119
KISSIMMEE RIVER, FL	15,568	17,568	1,625
LA CONNER, WA	317	100	0
LAKE PONCHARTRAIN HURRICANE PROTECTION, LA	1,514	2,325	2,325
LEVISA AND TUG FORKS, WV, VA, & KY	30,689	25,713	25,713
MCCOOK AND THORNTON RESERVOIR, IL	10,027	11,478	11,478
MELALUCCA QUARENTINE FACILITIES, FL	986	737	200
NANPIL RIVER HYDRO, POHNPEI, GU	42	0	0
NEW MELONES LAKE, CA	202	0	0
NEW YORK HARBOR COLL & REMVL DRIFT, NY	2,200	0	0
O'HARE RESEVOIR, IL	4,134	0	0
OUACHITA RIVER LEVEE, LA	4,770	3,493	3,493
PLATTE RIVER STREAMBANK EROSION, NE	1,409	659	0
QUONSET POINT, DAVISVILLE, RI	1,846	845	845
RED RIVER BANK STAB BELOW DENISON, AR, LA & TX (BOWIE)	2,781	597	597
RED RIVER BASIN CHLORIDE, TX	1,989	1,390	1,390
RED RIVER WATERWAY MISS RIVER TO SHREVEPORT, LA	604	0	0
RED RIVER WW EMER BANK PROTECTION, AR & LA	40	417	417
RICHMOND FILTRATION PLANT, VA	1,000	229	229
RILLITO RIVER, AZ	1,256	0	0
SACRAMENTO RIVER FLOOD CONTROL, CA (GLENN–COLUSA)	290	0	0
SACRAMENTO URBAN AREA LEVEE RECONST, CA	248	0	0
SALEM RIVER, NJ	800	0	0
SALYERSVILLE, KY.	1,019	0	0
SAVANNAH HARBOR, GA	0	1,900	1,900
SAYLORVILLE DAM AND LAKE, IA	397	0	0
SEEKONK RIVER, PROVIDENCE, RI	209	64	0
SILVER BAY HBR, MN	2,556	2,500	2,500
SONOMA BAYLANDS WETLAND DEMOSTRATION, CA	2,402	0	0
SOUTH CENTRAL PENNSYLVANIA ENVIR REST, PA (NAD)	4,661	7,008	2,500
SOUTH CENTRAL PENNSYLVANIA ENVIR REST, PA (ORD)	4,751	7,675	6,400
SOWASHEE CREEK, MERIDAN, MS	3,605	3,400	400
ST GENEVIEVE, MO	0	800	800
ST GEORGE HARBOR, AK	1,991	1,391	1,391
STILLWATER, MN	2,001	1,700	1,700
TAMPA BAY (PORT SUTTON), FL	366	365	0
TULSA AND WEST TULSA, OK	618	0	0
WALLISVILLE LAKE, TX	5,122	3,747	3,747
WEST COLUMBUS, OH	6,767	0	0
WILMINGTON HARBOR OCEAN BAR, NC	59	0	0
YOLO BASIN WETLANDS, CA	329	0	0
TOTAL	155,574	123,820	92,403

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CORPS OF ENGINEERS -- CIVIL
OPERATION AND MAINTENANCE, GENERAL
FENCED FUNDS THAT WILL NOT BE OBLIGATED IN FY 1995

(Dollars in Thousands)

Project Name	State	Fiscal Year Appropriated	Public Law No.	Act Amount	Amount Unobligated End Of FY 1994	Amount Unobligated End Of FY 1995	Amount Proposed For Obligation In FY 1996
Hansen Dam Recreation Development	CA	1994	103-126	2,790	2,790	2,790	2,790
Hansen Dam Recreation Development	CA	1993	102-377	2,285	1,715	1,800	1,800
Sepulveda Dam	CA	1991	101-514	2,500	1,815	1,000	1,000
Sepulveda Dam	CA	1993	102-377	2,000	2,000	1,900	1,900
Sepulveda Dam	CA	1992	102-104	1,000	1,000	930	930
Saginaw (Flint) River	MI	1991 Thru 1994	102-377	7,500	3,606	1,325	541
Missouri River Between Fort Peck & Gavins Point	MT	1992	99-662	1,500	1,410	434	0
Missouri River Between Fort Peck & Gavins Point	MT	1993	100-676	1,500	1,500	1,500	0
Eufaula Lake	OK	1988	100-202	388	300	300	0
Eufaula Lake	OK	1989	100-618	500	500	500	0
Erie Harbor (Niagara Berthing Area)	PA	1993	102-377	1,000	760	500	500
Raystown Lake	PA	1995	103-316	2,500	N/A	190	190
Charleston Harbor Rediversion	SC	1992	102-104	4,825	3,950	3,280	2,780
Totals				30,288	21,346	16,449	12,431

FLOOD CONTROL & COASTAL EMERGENCIES PROGRAM

Mr. MYERS. What is the current status of the Flood Control and Coastal Emergencies account?

General WILLIAMS. Of the $58.2 million available in the account on 1 October 1994, approximately $30.3 million has been allocated to emergency preparedness and operations activities and ongoing levee rehabilitation work remaining from the Midwest Floods of 1993. In addition, the remaining funds of $27.9 million have been committed for additional Midwest levee rehabilitation requirements, emergency operation activities associated with the Northridge earthquake, the Southeast Floods of 1994, the California Floods of 1995, and future requirements for the remainder of fiscal year 1995.

PERSONNEL-RELATED COSTS

Mr. MYERS. Provide for the record, by appropriation account, the funds requested for fiscal year 1996 for personnel related costs.

General WILLIAMS. Funds requested, by appropriation account, for fiscal year 1996 for personnel related costs are provided for the record.

(The information follows:)

FY96 Budget
Personnel-Related Costs 1/
(thousands of dollars)

Appropriation Account	Amount
General Investigations	97,875
Construction, General	194,207
Operation and Maintenance, General	723,286
Flood Control, Mississippi River and Tributaries	127,226
Regulatory Program	71,590
Flood Control and Coastal Emergencies	6,316
Revolving Fund	19,700
Permanent Appropriations	1,826
General Expenses	122,984
Rivers and Harbors Contributions	44,113
Coastal Wetlands Restoration	1,946
Oil Spill Research	138
Total	1,411,207

1/ Including personnel compensation and benefits, and costs of travel and transportation of persons and things.

Fiscal Year 1994 Corps Revenues

Mr. MYERS. Provide for the record a list showing the total revenues generated by Corps projects and programs in fiscal year 1994 indicating where the funds are deposited and how they are used.

General WILLIAMS. We will provide that list. All such revenues were returned to the Treasury, and were available to the Corps as offsetting receipts or appropriations in fiscal year 1994 or future years, unless otherwise noted.

[The information follows:]

FISCAL YEAR 1994 REVENUES GENERATED BY CORPS CIVIL WORKS PROJECTS AND RETURNED TO THE TREASURY

Headwater benefits 1/ 4/	$ 12,093,373
Allocated by power marketing agencies 2/ 6/	535,569,374
Miscellaneous fees for regulatory and judicial services, NOC 6/	1,281,734
Fines, penalties, and forfeitures, immigration and labor laws 6/	0
Forfeitures of unclaimed money and property 6/	9,494
Fines, penalties, and forfeitures, NOC 6/	440,042
General Fund Proprietary Interest, NOC/	22,596,291
General Fund Proprietary Receipts, All Other, NOC/	29,067,638
Special Recreation Use Fees, Army Corps of Engineers, Civil 5/	25,199,000
Hydraulic mining in California, tax, debris reservoirs 1/	48,000
Hydraulic mining in California, water storage and use of facilities, debris reservoirs	118,070
Lease of land acquired for flood control, navigation and allied purposes 1/ 3/	5,262,238
Inland Waterways Trust Fund 7/ 8/	99,724,355
Harbor Maintenance Trust Fund 7/ 9/	647,560,442
Gross total revenues, fiscal year 1994	$1,378,971,050
Budget clearing account 10/	-23,578,178
Net total revenues, fiscal year 1994	$1,355,391,873

1/ Permanent Appropriation, warranted to Corps the year following collection.

2/ Revenues for power generation includes only those amounts that marketing agencies have allocated to Corps projects.

3/ This amount is 75 percent of funds collected and is returned to States in lieu of taxes.

4/ Is appropriated under the account title Maintenance and Operation of Dams.

5/ This amount provides funding for the $18,000,000 warranted to the Corps in FY 1995 for Operation and Maintenance of Recreation areas.

6/ Is not available to be appropriated and is not accounted for as an offsetting receipt.

7/ Is not accounted for as an offsetting receipt.

8/ Includes $11,308,255 interest on investments.

9/ Includes $12,825,776 interest on investments.

10/ Deposits held in suspense transferred to correct accounts

NOC - Not otherwise Classified.

ANNUAL FLOOD DAMAGE REPORT

Mr. Myers. Provide for the record the annual flood damage report.

General WILLIAMS. The report on flood damages during fiscal year 1994 is currently being prepared and will be submitted to the Committee by the Assistant Secretary of the Army (Civil Works) upon completion, which I expect to occur by early May.

PROJECTS IN LITIGATION

Mr. MYERS. Bring the Committee up to date on the status of any project in litigation.

General WILLIAMS. I will provide the information for the record.

(The information follows:)

1. Columbia/Snake River Basin Projects, Idaho and Oregon - Several lawsuits have been filed in the District Court of Oregon and several appeals have been taken to the Ninth Circuit Court of Appeals challenging the Corps' and Bureau of Reclamation's operation of multiple-purpose dam and reservoir projects on the Columbia and Snake Rivers. These projects, along with other public and private hydroelectric projects, are coordinated in accordance with regional agreements and a treaty between the U.S. and Canada. Numerous environmental groups claim the operation of the projects is in violation of the requirements of the Endangered Species Act (ESA) and the National Environmental Policy Act (NEPA). In the course of the litigation, there have also been challenges to the coordination of project operations under the Federal Advisory Committee Act (FACA). Plaintiffs, intervenors, and amicus involved include numerous environmental groups; the states of Alaska, Idaho, Montana, Oregon, and Washington; the region's Indian Tribes; utility groups; and the aluminum industry. The Snake River sockeye salmon and spring/summer and fall stocks of Snake River chinook salmon are listed as endangered under the Endangered Species Act, requiring federal agencies to avoid actions which jeopardize the continued existence of the listed species. The actions of the Corps in providing releases of stored water, spilling more water at certain projects, transporting species in barges and trucks, and other operations of the projects involve issues of scientific, social, and economic debate within the region. The National Marine Fisheries Service is scheduled to release a biological opinion on March 1, 1995, which will describe actions that it recommends to the Corps to avoid jeopardizing the listed species. The Corps is scheduled to issue a decision on March 10, 1995. This schedule has been set by the District Court. (Northwest Resource Information Center, Inc., et al. v. National Marine Fisheries Service, et al.)

2. Dade County Beach Restoration Project, Florida - In an opinion entered on September 22, 1994 the judge found the Corps failed to comply with the procedural requirements of the National Environmental Policy Act (NEPA) with respect to this project, and she enjoined work on it. The Corps is now preparing a revised Environmental Impact Statement for the project. (Town of Golden Beach v. U.S. Army Corps of Engineers)

3. Elk Creek Dam, and Lake, Oregon - In June 1987, the Federal 9th Circuit Court of Appeals directed the District Court to enjoin construction of the $120 million project until completion of a Federal Environmental Impact Statement Supplement addressing certain NEPA deficiencies. The case was appealed to the Supreme Court, which reversed the Ninth Circuit's decision on May 1, 1989. The case was remanded to the Corps to prepare a supplemental EIS. On January 24, 1992 a Record of Decision was executed by the Division Engineer wherein the project was recommended for completion of construction and operation with a dry pool area until public demand for the use of the water which can be stored behind the dam is made. At that time another supplemental EIS will be prepared. In December 1992 a second lawsuit was filed against the Corps, the U.S. Forest Service, and the Bureau of Land Management alleging violations of NEPA for the Corps' failure to consider new information on fish resources in the Rogue River Basin, and violation of the Wild and Scenic Rivers Act by its failure to withdraw the Record of Decision after the USFS/BLM issued an adverse finding that the existing project is an unreasonable diminishment of the fishery values supporting the downstream wild and scenic river segments on the Rogue. Several petitions under the Endangered Species Act have been filed for the coho salmon and summer and winter steelhead. The court held hearings in May and December, 1993. On February 1, 1994 the court issued an opinion finding the Corps had complied with the requirements under the first lawsuit; the court lifted the injunction and dismissed that suit. However, in the second suit the court found that the Corps had not adequately considered new information on the migrating fish, and enjoined the Corps from constructing the project until such consideration is given. In addition, the court found that the Corps was obligated to withdraw the Record of Decision (ROD) after the USFS/BLM issued their adverse finding. It ordered the Corps to withdraw the ROD and enjoined the Corps from constructing and operating the project until it can eliminate the objections of USFS/BLM on the impairment to fish passage at the existing project. The Corps is now developing criteria with resource agencies in a study to provide successful fish passage through the project and overcome the adverse finding from USFS/BLM. The decision of the court was appealed by all parties to the Ninth Circuit. The plaintiffs seek removal of the dam, and the government argued that the court exceeded its authority when it ordered withdrawal of the ROD under the EIS Supplement in the face of the adverse USFS/BLM finding. We are awaiting the appellate court's decision. (Oregon Natural Resources Council v. Harrell)

4. Luxapalila Creek, Alabama - An environmental group is challenging the stream channelization project on Luxapalila Creek, a tributary of the Aliceville Pool of the Tennessee-Tombigbee Waterway. The plaintiff alleges that the Final Supplemental EIS, prepared in 1991 and supplemented by a subsequent Environmental Assessment in 1992 and a FONSI (Finding of No Significant Impact) in April, 1994 are legally inadequate because they fail to "adequately explore meaningful alternatives." No injunction has been issued. (The Alabama Conservancy v. Corps of Engineers)

5. Richard Russell Dam and Lake, South Carolina and Georgia - The South Carolina Department of Wildlife and Marine Resources secured an injunction halting all construction and installation of pumpback units at the project. They challenged the authorization of the project and alleged violations of the National Environmental Policy Act and the Clean Water Act. The U.S. appealed to the Fourth Circuit, which affirmed in part and reversed in part. Installation of the units was

permitted, but operation is still enjoined. Installation of the four pumpback turbines has been completed. A final supplemental EIS has been completed and the record of decision was signed in August 1991. The parties negotiated a consent order which allows the Corps to proceed with environmental and mechanical testing of the units. This includes a monitoring program to determine the impact of operation on the fish in the vicinity of the dam. The testing and monitoring program is ongoing and scheduled to be completed in September, 1995. At the conclusion of the program a decision will be made - either by agreement of the parties or by court order - regarding operation of the pumpback units. (South Carolina Department of Wildlife and Marine Resources v. Marsh)

6. West Pearl River Navigation Project, Louisiana - An environmental group has challenged the adequacy of the Environmental Impact Statement prepared for this project, alleging that the Corps (1) failed to consider the adverse impacts of dumping contaminated dredged material into Lake Pontchartrain, and (2) did not take into account the existence of a toxic waste site near a port proposed to be developed as part of the project. A collateral threat to the project also exists because the Sierra Club has sued the U.S. Fish and Wildlife Service over its failure to designate the Pearl River as a critical habitat for the endangered gulf sturgeon. No injunction has been issued. (Save Our Wetlands, Inc. v. Phernambucq)

BALANCE-TO-COMPLETE REPORT

Mr. MYERS. Prepare a detailed "balance-to-complete" report similar to that submitted for last year's hearings.

General WILLIAMS. Yes, sir.

(The information follows:)

CORPS OF ENGINEERS - CIVIL WORKS
SUMMARY OF PRECONSTRUCTION ENGINEERING & DESIGN (PED) AND CONSTRUCTION IN FY 1996 BUDGET REQUEST
(Thousands of Dollars)

	No. of Proj.	Est. Federal Cost	Allocations Thru FY 1995	Budget Request FY 1996	Balance to Complete	
					Programed	Unprogramed
PRIOR TO AUTHORIZATION:						
Continuing/Follow-on PED	38	2,063,703	56,935	25,071	19,738	1,961,959
Navigation	18	637,145	24,600	11,872	5,628	595,045
Beach Erosion Control	3	185,048	2,627	1,395	478	180,548
Flood Control	15	1,103,510	21,977	8,604	11,813	1,061,116
Multiple Purpose	1	24,000	419	1,000	1,331	21,250
MR&T Feature	1	114,000	7,312	2,200	488	104,000
FULLY AUTHORIZED PROJECTS:						
Continuing PED	27	2,053,098	96,818	15,681	20,527	1,920,072
Navigation	9	732,532	29,222	4,366	2,570	696,374
Beach Erosion Control	1	71,346	4,585	415	0	66,346
Flood Control	16	1,193,820	59,880	10,700	17,788	1,105,452
MR&T Feature	1	55,400	3,131	200	169	51,900
PED Total	65	4,116,801	153,753	40,752	40,265	3,882,031
Construction New Starts	2	104,900	4,900	1,300	98,700	0
Navigation	1	100,700	4,630	100	95,970	0
Flood Control	1	4,200	270	1,200	2,730	0
Continuing Construction	147	31,394,742	15,312,834	875,015	10,895,455	4,311,438
Navigation	34	7,894,330	4,443,107	206,066	2,342,373	902,784
Beach Erosion Control	12	2,062,148	173,886	60,971	1,800,924	26,367
Flood Control	80	9,794,190	4,155,631	296,288	2,577,559	2,764,712
Multiple Purpose	4	1,547,899	1,121,110	92,800	333,989	0
Environmental Restoration	3	265,270	38,242	950	1,849	224,229
MR&T Features	14	9,830,905	5,380,858	217,940	3,838,761	393,346
Major Rehabilitation (CG)	13	411,380	54,749	39,567	317,064	0
Navigation	5	108,400	29,321	14,254	64,825	0
Flood Control	2	41,780	4,418	2,083	35,279	0
Multiple Purpose	6	261,200	21,010	23,230	216,960	0
Dam Safety Assurance	8	139,827	53,809	19,095	66,923	0
Flood Control	5	57,727	13,017	8,187	36,523	0
Multiple Purpose	3	82,100	40,792	10,908	30,400	0
Construction Total	170	32,050,849	15,426,292	934,977	11,378,142	4,311,438
GRAND TOTAL	235	36,167,650	15,580,045	975,729	11,418,407	8,193,469

KEY TO ABBREVIATIONS

LMV	Lower Mississippi Valley Division
LMM	Memphis District
LMN	New Orleans District
LMS	St. Louis District
LMK	Vicksburg District

MRD	Missouri River Division
MRK	Kansas City District
MRO	Omaha District

NED	New England Division

NAD	North Atlantic Divison
NAB	Baltimore District
NAN	New York District
NAO	Norfolk District
NAP	Philadelphia District

NCD	North Central Division
NCB	Buffalo District
NCC	Chicago District
NCE	Detroit District
NCR	Rock Island District
NCS	St. Paul District

NPD	North Pacific Division
NPA	Alaska District
NPP	Portland District
NPS	Seattle District
NPW	Walla Walla District

ORD	Ohio River Division
ORH	Huntington District
ORL	Louisville District
ORN	Nashville District
ORP	Pittsburgh District

POD	Pacific Ocean Division

SAD	South Atlantic Division
SAC	Charleston District
SAJ	Jacksonville District
SAM	Mobile District
SAS	Savannah District
SAW	Wilmington District

SPD	South Pacific Division
SPL	Los Angeles District
SPK	Sacramento District
SPN	San Francisco District

SWD	Southwestern Division
SWA	Albuquerque District
SWF	Fort Worth District
SWG	Galveston District
SWL	Little Rock District
SWT	Tulsa District

PRECONSTRUCTION ENGINEERING AND DESIGN IN FY 96 BUDGET (PRIOR TO AUTH)
CONTINUING PED (THOUSANDS OF DOLLARS)

DIST	NAME	TOT EST FED COST	FED COST OF PED	ALLOC TO DATE	FY 96 BUDGET	BALANCE TO COMPLETE PROGRAMMED	BALANCE TO COMPLETE UNPROGRAMMED
BEACH EROSION							
NCC	CHICAGO SHORELINE, IL	143,000	2,000	1,428	400	172	141,000
NAN	LONG BEACH ISLAND, NY	35,500	1,250	419	525	306	34,250
NAO	SANDBRIDGE, VIRGINIA BEACH, VA	6,548	1,250	780	470	0	5,298
	TOTALS NO. OF PROJECTS	185,048 3	4,500	2,627	1,395	478	180,548
FLOOD CONTROL							
SPK	AMERICAN RIVER WATERSHED, CA	577,000	19,200	11,061	3,000	5,139	557,800
SPK	SAN LORENZO RIVER, CA	9,033	1,000	900	100	0	8,033
SPN	SAN RAFAEL CANAL, CA	19,100	2,110	1,860	250	0	16,990
ORL	METROPOLITAN LOUISVILLE, POND CREEK, KY	12,207	1,230	930	300	0	10,977
LMN	EAST BATON ROUGE PARISH, LA	134,200	1,750	250	900	600	132,450
LMN	WEST BANK - EAST OF HARVEY CANAL, LA	104,000	2,300	500	1,100	700	101,700
NAB	ANACOSTIA RIVER & TRIBUTARIES, MD & DC	28,200	4,200	700	1,100	2,400	24,000
MRK	BLUE RIVER BASIN, KANSAS CITY, MO	11,300	1,600	0	10	1,590	9,700
MRO	WOOD RIVER, GRAND ISLAND, NE	6,040	850	538	200	112	5,190
SWA	LAS CRUCES, EL PASO AND VICINITY, NM	6,000	400	200	200	0	5,600
ORL	METROPOLITAN REGION OF CINCINNATI, DUCK CREEK, OH, KY & IN	12,800	1,270	970	300	0	11,530
SAJ	ARECIBO RIVER, PR	12,500	1,300	955	281	64	11,200
SAJ	RIO GRANDE DE LOIZA, PR	133,300	2,500	2,047	453	0	130,800
MRO	BIG SIOUX RIVER, SIOUX FALLS, SD	27,000	1,814	995	390	429	25,186
MRO	WATERTOWN AND VICINITY, SD	10,830	870	71	20	779	9,960
	TOTALS NO. OF PROJECTS	1,103,510 15	42,394	21,977	8,604	11,813	1,061,116

PRECONSTRUCTION ENGINEERING AND DESIGN IN FY 96 BUDGET (PRIOR TO AUTH)
CONTINUING PED (THOUSANDS OF DOLLARS)

DIST	NAME	TOT EST FED COST	FED COST OF PED	ALLOC TO DATE	FY 96 BUDGET	BALANCE TO COMPLETE PROGRAMMED	BALANCE TO COMPLETE UNPROGRAMMED
MULTIPLE PURPOSE							
NPP	WILLAMETTE RIVER TEMPERATURE CONTROL, OR	24,000	2,750	419	1,000	1,331	21,250
	TOTALS NO. OF PROJECTS	24,000 1	2,750	419	1,000	1,331	21,250
NAVIGATION							
NPA	CHIGNIK HARBOR, AK	10,700	237	0	237	0	10,463
NPA	KAKE HARBOR, AK	12,860	333	147	186	0	12,527
SPN	CRESCENT CITY HARBOR, CA 1/	900	150	0	50	100	750
SPN	HUMBOLDT HARBOR AND BAY (DEEPENING), CA	7,700	660	125	410	125	7,040
SPL	PORT OF LONG BEACH (DEEPENING), CA 1/	35,000	750	0	750	0	34,250
SPL	SANTA BARBARA HARBOR, CA	4,670	550	500	50	0	4,120
SPL	SANTA MONICA BREAKWATER, CA	5,500	400	50	350	0	5,100
SAJ	HILLSBORO INLET, FL	3,800	450	150	300	0	3,350
SAJ	ST LUCIE INLET, FL 1/	1,100 *	1,100	0	400	700	
SAS	LOWER SAVANNAH RIVER BASIN, GA & SC 1/	9,000	600	0	250	350	8,400
LMN	PORT FOURCHON, LA	2,423	373	273	100	0	2,050
NAB	BALTIMORE HARBOR ANCHORAGES & CHANNELS, 1/ MD	11,800	1,500	0	50	1,450	10,300
SAW	WILMINGTON HARBOR, CHANNEL WIDENING, NC	18,795	1,350	780	570	0	17,445
NPP	COOS BAY, OR	10,807	970	647	0 2/	0	10,160
SWG	GIWW - ARANSAS NATIONAL WILDLIFE REFUGE, TX	20,400	1,720	20	750	950	18,680
SWG	HOUSTON - GALVESTON NAVIGATION CHANNELS, TX	295,900	18,780	15,727	1,100	1,953	277,120

1/ Follow-on from Cost-shared Studies

2/ Work to be accomplished with Programmed Unobligated Carryover scheduled to be expended in FY 96.

* PED cost only. Economic study to determine project cost will be completed in September 1995.

PRECONSTRUCTION ENGINEERING AND DESIGN IN FY 96 BUDGET (PRIOR TO AUTH)
CONTINUING PED (THOUSANDS OF DOLLARS)

DIST	NAME	TOT EST FED COST	FED COST OF PED	ALLOC TO DATE	FY 96 BUDGET	BALANCE TO COMPLETE	
						PROGRAMMED	UNPROGRAMMED
NAVIGATION							
NAO	AIWW BRIDGE AT GREAT BRIDGE, VA	22,790	2,000	1,000	1,000	0	20,790
ORH	MARMET LOCKS AND DAM, WV	163,000	10,500	5,181	5,319	0	152,500
	TOTALS NO. OF PROJECTS	637,145 18	42,423	24,600	11,872	5,628	595,045
	GRAND TOTALS NO. OF PROJECTS	1,949,703 37	92,067	49,623	22,871	19,250	1,857,959

MISSISSIPPI RIVER AND TRIBUTARIES
PRECONSTRUCTION ENGINEERING AND DESIGN IN FY 96 BUDGET (PRIOR TO AUTH)
CONTINUING PED (THOUSANDS OF DOLLARS)

DIST	NAME	TOT EST FED COST	FED COST OF PED	ALLOC TO DATE	FY 96 BUDGET	BALANCE TO COMPLETE	
						PROGRAMMED	UNPROGRAMMED
FLOOD CONTROL							
LMM	EASTERN ARKANSAS REGION (COMPREHENSIVE STUDY), AR	114,000	10,000	7,312	2,200	488	104,000
	TOTALS NO. OF PROJECTS	114,000 1	10,000	7,312	2,200	488	104,000
	GRAND TOTALS NO. OF PROJECTS	114,000 1	10,000	7,312	2,200	488	104,000

PRECONSTRUCTION ENGINEERING AND DESIGN IN FY 96 BUDGET (AUTH PROJECTS)
CONTINUING PED (THOUSANDS OF DOLLARS)

DIST	NAME	TOT EST FED COST	FED COST OF PED	ALLOC TO DATE	FY 96 BUDGET	BALANCE TO COMPLETE PROGRAMMED	BALANCE TO COMPLETE UNPROGRAMMED
BEACH EROSION							
SAM	PANAMA CITY BEACHES, FL	71,346	5,000	4,585	415	0	66,346
	TOTALS	71,346	5,000	4,585	415	0	66,346
	NO. OF PROJECTS	1					
FLOOD CONTROL							
SPK	NAPA RIVER, CA	67,400	11,200	10,413	787	0	56,200
SPN	PAJARO RIVER AT WATSONVILLE, CA	10,120	1,650	500	500	650	8,470
NAB	WASHINGTON, DC & VICINITY	5,100	2,837	2,637	200	0	2,263
LMS	NUTWOOD DRAINAGE AND LEVEE DISTRICT, IL	7,200	1,300	150	150	1,000	5,900
SWT	WINFIELD, KS	9,375	1,900	1,230	670	0	7,475
LMN	COMITE RIVER, LA	44,100	5,100	4,940	160	0	39,000
NAN	LOWER SADDLE RIVER, BERGEN COUNTY, NJ	48,800	6,800	5,837	963	0	42,000
NAN	RARITAN RIVER BASIN, GREEN BROOK SUB-BASIN, NJ	186,000	24,000	18,373	3,600	2,027	162,000
SAW	BRUNSWICK COUNTY BEACHES, NC	38,300	3,511	2,011	500	1,000	34,789
ORP	CHARTIERS CREEK, PA	6,225	1,000	430	570	0	5,225
SWG	BRAYS BAYOU, HOUSTON, TX	211,200	6,300	2,798	500	3,002	204,900
SWG	CYPRESS CREEK, HOUSTON, TX	136,800	6,800	1,745	300	4,755	130,000
SWF	DALLAS FLOODWAY EXTENSION, TRINITY RIVER, TX	110,000	4,330	1,797	500	2,033	105,670
SWG	GREENS BAYOU, HOUSTON, TX	162,200	4,040	3,146	300	594	158,160
SWG	SOUTH MAIN CHANNEL, TX	142,100	6,000	2,373	900	2,727	136,100
SPK	UPPER JORDAN RIVER, UT	8,900	1,600	1,500	100	0	7,300
	TOTALS	1,193,820	88,368	59,880	10,700	17,788	1,105,452
	NO. OF PROJECTS	16					

PRECONSTRUCTION ENGINEERING AND DESIGN IN FY 96 BUDGET (AUTH PROJECTS)
CONTINUING PED (THOUSANDS OF DOLLARS)

DIST	NAME	TOT EST FED COST	FED COST OF PED	ALLOC TO DATE	FY 96 BUDGET	BALANCE TO COMPLETE PROGRAMMED	UNPROGRAMMED
	NAVIGATION						
SPN	NOYO RIVER AND HARBOR (BREAKWATER), CA	19,990	3,830	3,271	559	0	16,160
NAP	DELAWARE RIVER MAIN CHANNEL DEEPENING, DE, NJ, & PA	285,800	10,000	9,018	780	202	275,800
SAM	PANAMA CITY HARBOR, FL	14,797	2,600	2,315	285	0	12,197
POD	KIKIAOLA SMALL BOAT HARBOR, KAUAI, HI	5,775	798	526	170	102	4,977
ORL	MCALPINE LOCKS AND DAM, KY & IN	299,700	10,270	7,873	1,487	910	289,430
NED	BOSTON HARBOR, MA	23,850	2,060	1,875	185	0	21,790
NAN	NEW YORK HBR AND ADJACENT CHANNELS, CLAREMONT TERMINAL, NJ	14,000	1,800	1,146	400	254	12,200
NAN	ARTHUR KILL CHANNEL - HOWLAND HOOK MARINE TERMINAL, NY & NJ	28,700	2,700	1,536	400	764	26,000
SWG	NECHES RIVER & TRIBS SALTWATER BARRIER, TX	39,920	2,100	1,662	100	338	37,820
	TOTALS NO. OF PROJECTS	732,532 9	36,158	29,222	4,366	2,570	696,374
	GRAND TOTALS NO. OF PROJECTS	1,997,698 26	129,526	93,687	15,481	20,358	1,868,172

MISSISSIPPI RIVER AND TRIBUTARIES
PRECONSTRUCTION ENGINEERING AND DESIGN IN FY 96 BUDGET (AUTH PROJECTS)
CONTINUING PED (THOUSANDS OF DOLLARS)

DIST	NAME	TOT EST FED COST	FED COST OF PED	ALLOC TO DATE	FY 96 BUDGET	BALANCE TO COMPLETE PROGRAMMED	UNPROGRAMMED
	FLOOD CONTROL						
LMM	LOWER WHITE RIVER, BIG CREEK & TRIBUTARIES, AR	55,400	3,500	3,131	200	169	51,900
	TOTALS NO. OF PROJECTS	55,400 1	3,500	3,131	200	169	51,900
	GRAND TOTALS NO. OF PROJECTS	55,400 1	3,500	3,131	200	169	51,900

CONSTRUCTION NEW STARTS IN FY 96 BUDGET
(THOUSANDS OF DOLLARS)

DIST	NAME	TOT EST FED COST	ALLOC TO DATE	FY 96 BUDGET	BALANCE TO COMPLETE PROGRAMMED	BALANCE TO COMPLETE UNPROGRAMMED
FLOOD CONTROL						
SWA	ABIQUIU DAM EMERGENCY GATES, NM	4,200	270	1,200	2,730	0
	TOTALS	4,200	270	1,200	2,730	0
	NO. OF PROJECTS	1				
NAVIGATION						
SPL	LOS ANGELES HARBOR, CA	100,700	4,630	100	95,970	0
	TOTALS	100,700	4,630	100	95,970	0
	NO. OF PROJECTS	1				
	GRAND TOTALS	104,900	4,900	1,300	98,700	0
	NO. OF PROJECTS	2				

CONTINUING CONSTRUCTION IN FY 96 BUDGET
(THOUSANDS OF DOLLARS)

DIST	NAME	TOT EST FED COST	ALLOC TO DATE	FY 96 BUDGET	BALANCE TO COMPLETE PROGRAMMED	BALANCE TO COMPLETE UNPROGRAMMED
BEACH EROSION						
SPL	SURFSIDE - SUNSET - NEWPORT BEACH, CA	34,240	16,368	100	5,500	12,272
NAP	DELAWARE COAST PROTECTION, DE	12,100	4,580	0 2/	0	7,520
SAJ	LEE COUNTY, FL (REIMBURSEMENT)	8,200	2,324	600	634	4,642
SAJ	MARTIN COUNTY, FL	25,600	1,150	3,202	21,248	0
SAJ	SARASOTA COUNTY, FL	55,200	7,505	4,400	41,362	1,933
NAN	SANDY HOOK TO BARNEGAT INLET, NJ	1,104,900	56,107	15,700	1,033,093	0
NAN	EAST ROCKAWAY INLET TO ROCKAWAY INLET AND JAMAICA BAY, NY	84,699	35,743	8,100	22,858	0
NAN	FIRE ISLAND INLET TO MONTAUK POINT, NY	524,000	21,947	10,400	491,653	0
SAW	FORT FISHER, NC	4,170	2,076	2,094	0	0
NCB	PRESQUE ISLE PENINSULA, PA (PERMANENT)	59,927	14,644	450	44,833	0
SAC	MYRTLE BEACH, SC	160,551	5,191	17,000	138,360	0
NAO	VIRGINIA BEACH, VA (REIMBURSEMENT)	8,561	6,251	925	1,385	0
	TOTALS NO. OF PROJECTS	2,062,148 12	173,886	60,971	1,800,924	26,367
ENVIRONMENTAL REST						
SPK	YOLO BASIN WETLANDS, SACRAMENTO RIVER, CA	7,170	6,450	720	0	0
SAJ	KISSIMMEE RIVER, FL	255,600	31,371	0 2/	0	224,229
NAB	CHESAPEAKE BAY OYSTER RECOVERY, MD	2,500	421	230	1,849	0
	TOTALS NO. OF PROJECTS	265,270 3	38,242	950	1,849	224,229
FLOOD CONTROL						
SPL	CLIFTON, AZ	9,900	8,833	900	167	0

2/ Work to be accomplished with Programmed Unobligated Carryover scheduled to be expended in FY 96.

CONTINUING CONSTRUCTION IN FY 96 BUDGET
(THOUSANDS OF DOLLARS)

DIST	NAME	TOT EST FED COST	ALLOC TO DATE	FY 96 BUDGET	BALANCE TO COMPLETE PROGRAMMED	BALANCE TO COMPLETE UNPROGRAMMED
	FLOOD CONTROL					
SPL	HOLBROOK, AZ	11,000	8,739	2,261	0	0
SPL	NOGALES WASH, AZ	6,400	1,559	75	4,766	0
SPL	RILLITO RIVER, AZ	25,000	16,106	4,894	4,000	0
SPK	COYOTE AND BERRYESSA CREEKS, CA	41,850	19,210	12,000	10,640	0
SPK	GUADALUPE RIVER, CA	63,300	30,250	8,100	24,950	0
SPL	LOS ANGELES COUNTY DRAINAGE AREA, CA	283,000	10,450	11,367	261,183	0
SPK	MARYSVILLE/YUBA CITY LEVEE RECONSTRUCTION, CA	23,300	5,637	6,000	11,663	0
SPK	MERCED COUNTY STREAMS, CA	85,900	15,548	700	1,600	68,052
SPK	SACRAMENTO RIVER BANK PROTECTION PROJECT, CA	112,200	88,272	3,000	14,654	6,274
SPK	SACRAMENTO RIVER FLOOD CONTROL PROJECT, CA (DEF CORR)	76,375	76,275	100	0	0
SPK	SACRAMENTO URBAN AREA LEVEE RECONSTRUCTION, CA	28,800	24,903	1,870	0	2,027
SPL	SANTA ANA RIVER MAINSTEM, CA	778,000	395,626	70,249	165,547	146,578
SPL	SANTA PAULA CREEK, CA	17,100	8,197	300	8,603	0
SPK	WEST SACRAMENTO, CA	15,200	2,347	7,000	5,853	0
SPK	WILDCAT AND SAN PABLO CREEKS, CA	17,700	16,460	1,240	0	0
SWA	ALAMOSA, CO	5,950	2,717	600	2,633	0
SAJ	CENTRAL AND SOUTHERN FLORIDA, FL	1,358,000	412,880	3,726	86,881	854,513
SAJ	DADE COUNTY, FL	170,400	51,728	1,300	117,372	0
POD	ALENAIO STREAM, HAWAII, HI	10,649	7,319	0 2/	0	3,330

2/ Work to be accomplished with Programmed Unobligated Carryover scheduled to be expended in FY 96.

CONTINUING CONSTRUCTION IN FY 96 BUDGET

(THOUSANDS OF DOLLARS)

DIST	NAME	TOT EST FED COST	ALLOC TO DATE	FY 96 BUDGET	BALANCE TO COMPLETE	
					PROGRAMMED	UNPROGRAMMED
	FLOOD CONTROL					
LMS	EAST ST LOUIS, IL	28,700	19,110	3,700	4,429	1,461
NCR	LOVES PARK, IL	21,100	10,311	750	10,039	0
NCC	MCCOOK AND THORNTON RESERVOIRS (CUP), IL	416,000	25,825	0 2/	0	390,175
LMS	REND LAKE, IL (DEF CORR)	5,300	0	300	5,000	0
NCE	FORT WAYNE METROPOLITAN AREA, IN	33,865	4,884	4,000	24,981	0
NCC	LITTLE CALUMET RIVER, IN	104,000	39,091	5,000	59,909	0
MRK	MISSOURI RIVER LEVEE SYSTEM, IA, NE, KS & MO	128,417	93,548	125	33,955	789
NCR	MUSCATINE ISLAND, IA	6,640	949	220	5,471	0
MRO	PERRY CREEK, IA	40,600	8,233	168	32,199	0
NCR	WEST DES MOINES, DES MOINES, IA	15,300	8,481	4,040	2,779	0
ORL	FRANKFORT, SOUTH FRANKFORT, KY	8,630	6,007	2,623	0	0
LMK	ALOHA - RIGOLETTE, LA	7,078	2,249	2,379	2,450	0
LMN	LAKE PONTCHARTRAIN AND VICINITY, LA (HURRICANE PROTECTION)	515,000	316,149	7,848	166,149	24,854
LMN	LAROSE TO GOLDEN MEADOW, LA (HURRICANE PROTECTION)	79,100	67,903	1,440	9,757	0
LMN	NEW ORLEANS TO VENICE, LA (HURRICANE PROTECTION)	166,000	134,670	3,360	28,020	0
LMN	WESTWEGO TO HARVEY CANAL, LA (HURRICANE PROTECTION)	61,800	20,717	1,000	40,083	0
NED	TOWN BROOK, QUINCY AND BRAINTREE, MA	25,200	23,910	990	300	0
NCS	CHASKA, MN	29,600	24,061	3,740	1,799	0
SAM	TOMBIGBEE RIVER AND TRIBUTARIES, MS & AL	35,745	30,924	4,686	0	135

2/ Work to be accomplished with Programmed Unobligated Carryover scheduled to be expended in FY 96.

CONTINUING CONSTRUCTION IN FY 96 BUDGET
(THOUSANDS OF DOLLARS)

DIST	NAME	TOT EST FED COST	ALLOC TO DATE	FY 96 BUDGET	BALANCE TO COMPLETE	
					PROGRAMMED	UNPROGRAMMED
FLOOD CONTROL						
MRK	BLUE RIVER CHANNEL, KANSAS CITY, MO	185,000	77,422	9,600	97,978	0
LMS	CAPE GIRARDEAU - JACKSON, MO	32,900	24,669	200	6,208	1,823
LMS	MERAMEC RIVER BASIN, VALLEY PARK LEVEE, MO	13,900	6,601	0 2/	0	7,299
LMS	ST GENEVIEVE, MO	38,780	7,569	0 2/	0	31,211
MRO	MISSOURI NATIONAL RECREATIONAL RIVER, NE & SD	21,000	1,957	20	772	18,251
SPL	TROPICANA AND FLAMINGO WASHES, NV	169,900	15,651	4,000	150,249	0
NAP	MOLLY ANN'S BROOK AT HALEDON, PROSPECT PARK AND PATERSON, NJ	23,600	5,594	3,750	14,256	0
NAN	RAMAPO RIVER AT OAKLAND,NJ	8,315	2,015	70	6,230	0
SWA	ACEQUIAS IRRIGATION SYSTEM, NM	63,900	10,364	120	53,416	0
SWA	ALAMOGORDO, NM	31,800	3,143	100	28,557	0
SWA	MIDDLE RIO GRANDE FLOOD PROTECTION, BERNALILLO TO BELEN, NM	45,300	6,874	0 2/	0	38,426
SWA	RIO GRANDE FLOODWAY, SAN ACACIA TO BOSQUE DEL APACHE, NM	53,200	9,275	0 2/	0	43,925
NAN	NORTH ELLENVILLE, NY (DEF CORR)	6,100	2,085	4,015	0	0
SAW	CAROLINA BEACH AND VICINITY, NC	185,480	15,007	3,300	167,173	0
NCS	SHEYENNE RIVER, ND	31,800	21,199	500	10,101	0
NCS	SOURIS RIVER BASIN, ND	105,370	103,887	0 2/	0	1,483
ORH	WEST COLUMBUS, OH	83,250	25,005	2,800	55,445	0
SWT	FRY CREEKS, BIXBY, OK	13,425	2,942	1,700	8,783	0
SWT	MINGO CREEK, TULSA, OK	76,500	58,433	4,400	13,667	0

2/ Work to be accomplished with Programmed Unobligated Carryover scheduled to be expended in FY 96.

CONTINUING CONSTRUCTION IN FY 96 BUDGET
(THOUSANDS OF DOLLARS)

DIST	NAME	TOT EST FED COST	ALLOC TO DATE	FY 96 BUDGET	BALANCE TO COMPLETE	
					PROGRAMMED	UNPROGRAMMED
FLOOD CONTROL						
NPP	ELK CREEK LAKE, OR	174,000	107,851	500	0	65,649
NAB	LACKAWANNA RIVER, OLYPHANT, PA	10,900	1,892	240	8,768	0
NAB	LACKAWANNA RIVER, SCRANTON, PA	15,400	2,048	357	12,995	0
ORP	TURTLE CREEK, PA	22,401	20,437	1,964	0	0
NAB	WYOMING VALLEY, PA (LEVEE RAISING)	100,000	12,778	4,300	82,922	0
SAJ	PORTUGUES AND BUCANA RIVERS, PR	415,700	342,163	12,451	61,303	0
SAJ	RIO DE LA PLATA, PR	62,400	3,634	250	58,516	0
SAJ	RIO PUERTO NUEVO, PR	305,500	15,671	7,000	282,829	0
SWF	BEALS CREEK, BIG SPRING, TX	3,950	2,034	1,916	0	0
SWG	CLEAR CREEK, TX	68,550	15,198	0 2/	0	53,352
SWA	EL PASO, TX	113,400	89,474	400	23,526	0
SWT	MCGRATH CREEK, WICHITA FALLS, TX	7,270	2,817	110	4,343	0
SWF	RAY ROBERTS LAKE, TX	315,200	309,667	3,500	2,033	0
SWT	RED RIVER BASIN CHLORIDE CONTROL, TX & OK	215,000	42,818	0 2/	0	172,182
SWF	SAN ANTONIO CHANNEL IMPROVEMENT, TX	145,300	138,203	7,097	0	0
SWG	SIMS BAYOU, HOUSTON, TX	212,700	30,109	12,000	170,591	0
NAO	JAMES R OLIN FLOOD CONTROL PROJECT, VA	38,500	10,756	7,400	13,194	7,150
SAW	ROANOKE RIVER UPPER BASIN, HEADWATERS AREA, VA	23,600	4,773	400	18,427	0
NPS	CHEHALIS RIVER, SOUTH ABERDEEN AND COSMOPOLIS, WA	10,700	8,963	1,377	360	0
ORN	LEVISA AND TUG FORKS AND UPPER CUMBERLAND RIVER, WV, VA & KY	1,441,600	542,439	6,300	66,871	825,990

2/ Work to be accomplished with Programmed Unobligated Carryover scheduled to be expended in FY 96.

CONTINUING CONSTRUCTION IN FY 96 BUDGET
(THOUSANDS OF DOLLARS)

DIST	NAME	TOT EST FED COST	ALLOC TO DATE	FY 96 BUDGET	BALANCE TO COMPLETE PROGRAMMED	BALANCE TO COMPLETE UNPROGRAMMED
FLOOD CONTROL						
NAB	MOOREFIELD, WV	16,800	5,947	4,200	6,653	0
NAB	PETERSBURG, WV	17,700	6,239	7,900	3,561	0
	TOTALS NO. OF PROJECTS	9,794,190 80	4,155,631	296,288	2,577,559	2,764,712
MULTIPLE PURPOSE						
SAS	RICHARD B RUSSELL DAM AND LAKE, GA & SC	575,000	569,200	4,400	1,400	0
ORN	BARKLEY DAM AND LAKE BARKLEY, KY	157,299	146,499	1,600	9,200	0
NPW	COLUMBIA RIVER JUVENILE FISH MITIGATION, WA, OR & ID	583,600	192,367	78,800	312,433	0
NPW	LOWER SNAKE RIVER FISH & WILDLIFE COMPENSATION, WA, OR & ID	232,000	213,044	8,000	10,956	0
	TOTALS NO. OF PROJECTS	1,547,899 4	1,121,110	92,800	333,989	0
NAVIGATION						
SAM	BAYOU LA BATRE, AL	6,279	4,394	1,000	885	0
SAM	BLACK WARRIOR AND TOMBIGBEE RIVERS, VICINITY OF JACKSON, AL	16,141	1,371	500	14,270	0
SAM	TENNESSEE - TOMBIGBEE WATERWAY WILDLIFE MITIGATION, AL & MS	87,300	70,747	12,400	4,153	0
NPA	KODIAK HARBOR, AK	15,454	12,454	3,000	0	0
SWL	MCCLELLAN - KERR AR RVR NAV SYSTEM, LOCKS AND DAMS, AR & OK	649,000	613,179	6,000	29,821	0
SPL	MORRO BAY HARBOR, CA	2,200	2,076	124	0	0
SPN	OAKLAND HARBOR, CA	89,235	38,169	14,000	37,066	0
SPN	RICHMOND HARBOR, CA	25,750	7,879	3,296	14,575	0

CONTINUING CONSTRUCTION IN FY 96 BUDGET
(THOUSANDS OF DOLLARS)

DIST	NAME	TOT EST FED COST	ALLOC TO DATE	FY 96 BUDGET	BALANCE TO COMPLETE	
					PROGRAMMED	UNPROGRAMMED
NAVIGATION						
SPK	SACRAMENTO RIVER DEEPWATER SHIP CHANNEL, CA	24,900	7,717	100	17,083	0
SPN	SAN FRANCISCO BAY TO STOCKTON, CA	172,250	63,979	800	86,886	20,585
SPN	SONOMA BAYLANDS WETLAND DEMONSTRATION PROJECT, CA	6,375	5,876	500	0	0
SAJ	FORT PIERCE HARBOR, FL	6,770	4,180	2,590	0	0
SAJ	MANATEE HARBOR, FL	18,684	3,105	1,450	14,129	0
SAJ	MIAMI HARBOR CHANNEL, FL	51,066	14,651	1,000	35,415	0
POD	MAALAEA HARBOR, MAUI, HI	9,439	4,848	0 2/	0	4,591
LMS	MELVIN PRICE LOCK AND DAM, IL & MO	738,500	718,323	2,400	17,777	0
ORL	OLMSTED LOCKS AND DAM, IL & KY	1,050,000	149,848	32,100	868,052	0
NCR	UPPER MISS RIVER SYSTEM ENV MGMT PROG, IL, IA, MO, MN & WI	246,899	110,714	19,455	116,730	0
MRK	MISSOURI RIVER FISH AND WILDLIFE MITIGATION, IA, NE, KS & MO	69,900	23,760	5,700	40,440	0
LMN	MISSISSIPPI RIVER - GULF OUTLET, LA	584,000	101,696	3,200	1,885	477,219
LMN	MISSISSIPPI RIVER SHIP CHANNEL, GULF TO BATON ROUGE, LA	157,000	24,475	0 2/	0	132,525
LMK	RED RIVER WATERWAY, MISSISSIPPI RIVER TO SHREVEPORT, LA	1,726,416	1,640,330	16,673	20,009	49,404
SAM	PASCAGOULA HARBOR, MS	35,170	9,248	2,812	0	23,110
LMS	MISS RIVER BTWN THE OHIO AND MO RIVERS (REG WORKS), MO & IL	210,000	174,424	5,700	29,876	0
NAN	NEW YORK HARBOR & ADJACENT CHANNELS, PORT JERSEY CHANNEL, NJ	15,360	2,321	550	12,489	0

2/ Work to be accomplished with Programmed Unobligated Carryover scheduled to be expended in FY 96.

CONTINUING CONSTRUCTION IN FY 96 BUDGET
(THOUSANDS OF DOLLARS)

DIST	NAME	TOT EST FED COST	ALLOC TO DATE	FY 96 BUDGET	BALANCE TO COMPLETE PROGRAMMED	BALANCE TO COMPLETE UNPROGRAMMED
NAVIGATION						
NAP	SALEM RIVER, NJ	6,826	3,250	3,576	0	0
NAN	NEW YORK HARBOR COLLECTION AND REMOVAL OF DRIFT, NY & NJ	127,000	45,103	100	906	80,891
SAW	AIWW - REPLACEMENT OF FEDERAL HIGHWAY BRIDGES, NC	80,600	42,971	6,500	31,129	0
ORP	LOCKS AND DAMS 2, 3 & 4, MONONGAHELA RIVER, PA	664,000	15,789	15,000	633,211	0
SWG	CHANNEL TO VICTORIA, TX	24,616	4,172	3,100	17,344	0
SWG	GIWW - SARGENT BEACH, TX	78,800	13,590	20,000	45,210	0
NAO	NORFOLK HARBOR AND CHANNELS (DEEPENING), VA	137,400	18,261	600	4,080	114,459
ORH	ROBERT C BYRD LOCKS AND DAM, OHIO RIVER, WV & OH	384,000	309,960	10,000	64,040	0
ORH	WINFIELD LOCKS AND DAM, WV	377,000	180,248	11,840	184,912	0
	TOTALS NO. OF PROJECTS	7,894,330 34	4,443,107	206,066	2,342,373	902,784
	GRAND TOTALS NO. OF PROJECTS	21,563,837 133	9,931,976	657,075	7,056,694	3,918,092

MISSISSIPPI RIVER AND TRIBUTARIES
CONTINUING CONSTRUCTION IN FY 96 BUDGET
(THOUSANDS OF DOLLARS)

DIST	NAME	TOT EST FED COST	ALLOC TO DATE	FY 96 BUDGET	BALANCE TO COMPLETE PROGRAMMED	BALANCE TO COMPLETE UNPROGRAMMED
FLOOD CONTROL						
LMV	CHANNEL IMPROVEMENT, AR, IL, KY, LA, MS, MO & TN	3,570,000	2,351,996	63,090	1,154,914	0
LMM	EIGHT MILE CREEK, AR	8,620	2,068	580	5,972	0
LMV	MISSISSIPPI RIVER LEVEES, AR, IL, KY, LA, MS, MO & TN	1,341,000	745,954	32,450	562,596	0
LMM	ST FRANCIS BASIN, AR & MO	381,000	334,461	10,000	36,539	0
LMK	TENSAS BASIN - OVERALL	478,000	277,037	11,294	76,047	113,622
LMM	WHITEMAN'S CREEK, AR	3,340	1,358	850	1,132	0
LMN	ATCHAFALAYA BASIN, FLOODWAY SYSTEM, LA	164,000	35,328	5,300	78,433	44,939
LMN	ATCHAFALAYA BASIN, LA	1,660,000	759,754	27,000	873,246	0
LMN	MISSISSIPPI AND LOUISIANA ESTUARINE AREAS, MS & LA	57,200	6,783	1,500	48,917	0
LMN	MISSISSIPPI DELTA REGION, LA	92,800	35,247	13,300	31,211	13,042
LMM	HORN LAKE CREEK & TRIBUTARIES (INCL COW PEN CREEK), MS & TN	2,400	2,233	148	1	18
LMK	YAZOO BASIN - OVERALL	1,926,145	772,684	47,928	955,752	149,781
LMM	NONCONNAH CREEK, TN & MS	18,400	9,242	1,600	6,982	576
LMM	WEST TENNESSEE TRIBUTARIES, TN	128,000	46,713	2,900	7,019	71,368
	TOTALS NO. OF PROJECTS	9,830,905 14	5,380,858	217,940	3,838,761	393,346
	GRAND TOTALS NO. OF PROJECTS	9,830,905 14	5,380,858	217,940	3,838,761	393,346

MAJOR REHABILITATION IN FY 96 BUDGET (CG FUNDED)
(THOUSANDS OF DOLLARS)

DIST	NAME	TOT EST FED COST	ALLOC TO DATE	FY 96 BUDGET	BALANCE TO COMPLETE PROGRAMMED	BALANCE TO COMPLETE UNPROGRAMMED
FLOOD CONTROL						
NCS	LAKE ASHTABULA AND BALDHILL DAM, ND (MAJOR REHAB)	6,280	4,418	853	1,009	0
ORP	JOHNSTOWN, PA (MAJOR REHAB)	35,500	0	1,230	34,270	0
	TOTALS NO. OF PROJECTS	41,780 2	4,418	2,083	35,279	0
MULTIPLE PURPOSE						
SWL	DARDANELLE LOCK AND DAM POWERHOUSE, AR (MAJOR REHAB)	29,700	5,091	3,500	21,109	0
SAM	JIM WOODRUFF LOCK AND DAM POWERHOUSE, FL & GA (MAJOR REHAB)	30,600	0	600	30,000	0
SAS	HARTWELL LAKE POWERHOUSE, GA & SC (MAJOR REHAB)	17,700	0	1,400	16,300	0
SAS	THURMOND LAKE POWERHOUSE, GA & SC (MAJOR REHAB)	69,700	0	2,200	67,500	0
NPP	BONNEVILLE POWERHOUSE PHASE I, OR & WA (MAJOR REHAB)	27,100	12,111	8,530	6,459	0
NPP	BONNEVILLE POWERHOUSE PHASE II, OR & WA (MAJOR REHAB)	86,400	3,808	7,000	75,592	0
	TOTALS NO. OF PROJECTS	261,200 6	21,010	23,230	216,960	0
NAVIGATION						
NCR	FOUR LOCKS, ILLINOIS WATERWAY, IL (MAJOR REHAB)	27,200	23,946	3,254	0	0
LMS	LOCK AND DAM 24, MISSISSIPPI RIVER, IL & MO (MAJOR REHAB)	23,100	0	2,000	21,100	0
LMS	LOCK AND DAM 25, MISSISSIPPI RIVER, IL & MO (MAJOR REHAB)	21,400	4,028	4,300	13,072	0
NCC	BURNS WATERWAY HARBOR, IN (MAJOR REHAB)	15,800	1,347	4,000	10,453	0
NCR	LOCK AND DAM 14, MISSISSIPPI RIVER, IA (MAJOR REHAB)	20,900	0	700	20,200	0
	TOTALS NO. OF PROJECTS	108,400 5	29,321	14,254	64,825	0
	GRAND TOTALS NO. OF PROJECTS	411,380 13	54,749	39,567	317,064	0

SUPPORT FOR OTHERS

Mr. MYERS: Please provide a detailed breakdown, including the dollar volume and manpower requirements, of the work the Corps is scheduled to perform in fiscal year 1996 for other Federal agencies and state and local governments.

General WILLIAMS: The Corps of Engineers current estimate of support to other agencies and entities in FY 96 will be provided for the record. This projection, which is being updated since the President's budget was released, is based on our knowledge of the program at this time and does not include unknown requests for future assistance. For example, our emergency work for the Federal Emergency Management Agency is dependent upon natural disasters and is unpredictable.

(The information follows:)

PROJECTED SUPPORT FOR OTHERS (SFO) PROGRAM
FY 1996

AGENCY	$(M)	Work Years
Department of Energy		
Environmental	120	210
Facilities	5	13
Environmental Protection Agency		
Superfund	240	300
Construction Grants	7	115
Other	15	55
Federal Emergency Management Agency	12	80
Department of Housing and Urban Development	8	95
Department of Interior	80	100
Other Federal/State Agencies		
Environmental	65	150
Facilities	145	165

Note: Environmental support to other Federal agencies includes the Departments of Commerce, Agriculture, and Transportation and FEMA. Facilities support to other Federal agencies includes the Departments of State, Agriculture, Transportation, and Health and Human Services, the General Services Administration and the Environmental Protection Agency.

CIVIL FUNCTIONS IN FOREIGN COUNTRIES UPDATE

Mr. MEYERS. Please bring the Committee up to date on the work the Corps is doing in civil functions in foreign countries.

General WILLIAMS. Most of the Corps civil functions overseas support Federal agency programs on a reimbursable basis. In addition, we execute our congressionally appropriated civil works activities and, on occasion, provide support to international organizations and foreign nations. I will provide more detailed accounting for the record.

(The information follows:)

CORPS CIVIL FUNCTIONS IN FOREIGN COUNTRIES

The following is a list of Corps reimbursable work for other Federal Agencies.

U.S. Agency for International Development (USAID)-- Through USAID, the Corps prepared a Recovery Action Report (RAP) for the Republic of the Philippines which provided recommendations to reduce the damages caused by mudflows and sediment which resulted from the Mt. Pinatubo eruption. The RAP documents were turned over to USAID on 15 December, 1994. Financial close out for the project is anticipated by 31 March, 1995.

Environmental Protection Agency (EPA)-- The Corps is supporting EPA in Poland through the Support for Eastern European Democracies Act. The program is valued at $4 million, and includes procurement of water and wastewater treatment equipment for the City of Krakow. Contracts were awarded in September 94 for Chlorination and Ozonation systems. The Corps has also been involved with EPA in support of environmental initiatives at the U.S./Mexico border at Tijuana. So far, the Gorps' portion of this $400 million program is approximately $11 million.

U.S. Information Agency (USIA)-- The Corps provides construction and design services for U.S. Information Service (USIS) and Voice of America (VOA). Since 1984, the Corps has provided services valued at $4.7 million for the $75 million VOA program. This work has taken place in the countries of Thailand, Morocco, Botswana, Kuwait, Sao Tome, and the Marianas Islands. Future work for the USIS program is estimated at approximately $500,000 for security upgrade projects in Germany, Niger, Dominican Republic, Philippines, Kenya, Greece, Japan, Israel, Burkino Faso, Mayanmar, and Nigeria.

Department of Interior (DOI)-- On 30 January, 1995, the Corps and the DOI Office of Territorial and International Activities (OTIA) signed a work order for a 53 mile road project in Palau. This work order was written under a 1988 MOA between the Department of Army and DOI. Two recent events that might compromise this project are the impending closure of the OTIA on 1 October, 1995, and the President's FY96 budget proposal to terminate the operations of the Palau Trust Territory Office.

National Science Foundation (NSF)-- By agreement with the NSF, the Corps' Cold Regions Research Lab (CRREL) is providing technical support for Antarctic operations in the areas of construction and maintenance, including design of concepts and testing for snow and ice runways and roads; over snow transport; and design of facilities and special purpose equipment.

Panama Canal Commission (PCC)-- The Corps is providing $600,000 in design and analysis services for construction of stoplogs for the Panama Canal Locks, valued at $5 million. Recently, $80,000 in aerial photography and photogrammetric support for the PCC was completed.

Department of State (DOS)-- Work is essentially complete for the DOS/Foreign Buildings Operation, which consisted of building renovation in the former Soviet Union to serve as U.S. embassies. Contracts in Latvia, Estonia, Lithuania, Ukraine, Belarus, and Moldavia were completed last fiscal year. Work which was underway in Azerbaijan, Georgia, Armenia, and Kazakhstan was terminated in early fiscal year 95 due to cost escalation resulting from unforeseen conditions of the structures. Demobilization of personnel was completed in December 94.

The Corps is also providing design and construction support to the DOS/Narcotics Affairs Section in Bolivia. This work consists of design and construction management of an air operations control center in Santa Cruz.

The following is a listing of our reimbursable work for foreign nations.

Federated States of Micronesia-- The Corps recently completed an analysis of structural problems at the Yap Airport runway funded by the Federated States of Micronesia.

Honduras-- An MOA with the Honduran Government is anticipated for assistance to the Ministry of Communications, Public Works, and Transportation. The potential five year program is estimated at $500,000. The first work order would include technical assistance on the repair of La Mesa airport in San Pedro Sula.

Bahamas-- A draft MOA is currently being reviewed at Assistant Secretary of the Army (Civil Works) for work for the Commonwealth of The Bahamas Government (CTBG). The CTBG is requesting assistance in alleviating drainage problems in New Providence (Nassau).

Jamaica-- A Memorandum of Agreement is under review internally for technical assistance to the Government of Jamaica (GOJ) for expansion of the Kingston harbor. This effort would potentially involve modification to berthing facilities, dredging, and simulation modeling.

The following is a listing of our reimbursable support to U.S. private firms.

Under a Technical Assistance Agreement (TAA) with Alden Research Laboratory (authorized by the Water Resource Development Act (WRDA) of 1990) the Corps performed a physical hydraulic model to analyze ice concerns at the Niagara Power Project Intake. The model testing is complete, and the final report is being reviewed by the Federal Energy Regulatory Commission. Completion is anticipated in June, 1995.

Two TAA's have been executed with Louis Berger International, Inc. (LBII), with potential for a third. The work includes improvement of navigation and signalization on the Paraguay-Parana River system in Latin America, and additional development of the recovery action plan for the Mount Pinatubo remediation program in the Philippines. Potential work includes roadway rehabilitation in Russia, for which TAA negotiations are awaiting funding decisions by the project sponsors.

The following is a listing of our Congressionally authorized civil works activities overseas.

Souris River, Canada-- The Corps completed payment transfers for purchasing flood control storage in two large reservoirs constructed by Canada. This measure was undertaken to protect downstream areas in North Dakota from flooding. Further inspection work by the Corps will take place on the Alameda Dam portion of the project.

St. Mary's River, Canada-- The Corps is preparing to dredge the navigation channel between Lakes Superior and Huron. Part of the channel lies on the Canadian side of the international boundary. Draft comments recently received from Canada indicate approval of the project subject to certain conditions. Those conditions are being reviewed by appropriate U.S. agencies.

International Joint Commission (IJC)-- Congress annually appropriates funds for the Corps to provide engineering and technical support to the IJC for water resources issues between the U.S. and Canada.

Northern Sea Route-- Congress has authorized the Corps to do a reconnaissance study of American channel and port improvements that might be justified on the basis of future Northern Sea Route commerce in the Arctic Ocean. Russian, Canadian, and Finnish experts are participating in providing expertise and /or data.

Nanpil Hydropower Plant, Micronesia-- In late December, 1994, the Corps completed the final items of work on the Nanpil Hydropower Plant.

Flood Warning System, Mexico-- As part of flood damage reduction measures for Santa Cruz county, Arizona, WRDA 90 authorization included installation of a flood warning system in Mexico.

The following is a listing of scientific and technology exchanges with foreign nations.

Intergovernmental Panel on Climate Change (IPCC)-- The Corps, through the Institute for Water Resources, continues to be a key player on the IPCC, and is a lead author of four chapters of the IPCC report, due for completion by December, 1995. Other Corps efforts in support of the IPCC are directed towards the study of economic impacts associated with global warming and are being coordinated with the National Science and Technology Council, Committee on the Environment and Natural Resources. The IPCC's second assessment will address potential impacts on sea level rise, hydrology, water resources management, and wetlands.

U.S. - Japan Natural Resources Exchange-- This technological exchange focuses on seismic engineering for dams and large structures, coastal engineering for storm damage reduction, and environmental technology for managing contaminated dredge material. The Corps is also exploring the benefits of possible cooperation with Japan on water resources technology.

Permanent International Association of Navigation Congresses-- This body was founded to foster progress on inland and maritime navigation and port development. The Corps participates under the authorization of 22 USC 266 and 275a.

U.S. - Finland Agreement on Science and Technology-- The Corps is cooperating with the Technical Research Centre of Finland on cold regions pavement design and geotechnics, concrete technology, and the effects of ice on structures.

London Convention on the Prevention of Marine Pollution-- The Office of Assistant Secretary of the Army (Civil Works) is a member of the U.S. delegation, primarily to remain fully informed on issues which might affect the Civil Works Program and Corps dredging activities.

PRIVATE SECTOR DREDGING CAPABILITY

Mr. MYERS. Hasn't the private sector been able to do the work asked of it at prices generally below the government estimate even in the past two years of near record dredging needs?

General WILLIAMS. Overall industry has responded to the Corps dredging needs.

Mr. MYERS. Given the private sector's demonstrated capability, wouldn't the spirit if not the letter of the 1978 law require the Corps to reduce the size of the Federal fleet?

General WILLIAMS. Since 1978, the Corps has reduced its dredging fleet as industry has demonstrated they have the capability to do the dredging at a reasonable price and in a timely manner. However, as Dr. Zirschky stated in the October 31, 1994, News Release, that existing studies do not provide sufficient certainty that the dredging needs of the country can be met by the private sector alone. The Corps is increasing its data collection in order to accurately establish the performance and capability requirements for dredges. Dr. Zirschky anticipates that the minimum dredge fleet decision can be revisited in about 2 years. For the last two years the Corps has advertised for competitive bid 7.5 million cubic yards of maintenance work previously performed by Government hopper dredges. Industry has shown its ability to do this work and we will make this amount of work available to the private sector for the forseeable future.

CORPS HOPPER DREDGES - HOME PORTS

Mr. MYERS. Assuming the criteria in the 1978 law have been met, what innovative ways can you suggest to implement the requirements of the law which might address local concerns raised in areas where the Corps vessels are homeported?

GENERAL WILLIAMS. Assuming industry has demonstrated a capability to meet the dredging needs of the country, including local concerns for immediate response in rapid shoaling waterways such as the lower Mississippi River, the Corps minimum dredge fleet decommissioning would be accomplished in a responsible and sensitive way. I would follow the spirit of the law and reduce the Federal dredge fleet in an orderly manner.

CORPS HOPPER DREDGE MCFARLAND REPAIRS

Mr. MYERS. The Corps budget justification documents indicate $8 million will be spent on "rehabilitation" of the oldest Federal hopper dredge, the McFarland? Isn't the Corps also planning to spend up to an additional $10 million on "repairs" on the vessel using the revolving funds account? Isn't it a little misleading to mention one expenditure without detailing the other?

General WILLIAMS. The $8 million, in the Corps PRIP program budget request, is for a major overhaul of the McFARLAND, which was built in 1967. This is in addition to the normal annual repairs that are performed on each hopper dredge. Annual repair costs for the McFarland have ranged from $4 to 7 million. The funds for these repairs are paid from the dredge operating account, which are accrued from the daily rental. I do not consider this misleading, since these repairs are normal routine annual repairs and we have not previously highlighted routine maintenance costs on any vessel as a line item in the budget.

Mr. MYERS. Given the private sector's demonstrated capability what justification could there possibly be to spend as much as $18 million in the FY 96 budget for repairs and rehabilitation of the McFarland. Isn't this a classic case of throwing good money after bad?

General WILLIAMS. As the Acting Assistant Secretary stated earlier, existing studies do not provide sufficient certainty that the dredging needs of the country can be met by the private sector alone. Without that certainty, we must proceed with maintaining a dredging fleet that is capable of meeting the needs of the country. Spending $8 million to improve the efficiency of the McFarland will allow us to respond and dredge more efficiently and economically. This would save the taxpayer money in the long term.

HOPPER DREDGE MCFARLAND REPAIRS
PURPOSE OF PROPOSED OVERHAUL

Mr. MYERS. Rather than spend $18 million on repairs to an obsolete federal dredge and then evaluate whether it is really needed (which is what your budget sheets apparently indicate you intend to do), wouldn't it make more sense to tie up the vessel and see if the private sector can do the additional work? If the private sector can do the work the repairs to the McFarland could clearly not be needed and you could get rid of the vessel. Doesn't the 1978 law require you to move this work to the private sector now, not after spending more on an obsolete dredge?

General WILLIAMS. (1) I do not consider the McFarland to be an obsolete dredge. It is 28 years old and technology has advanced since the dredge was constructed. (2) The proposed overhaul is to incorporate electronic technology and other efficiency measures into the McFarland's system. We will work with industry during the time the McFARLAND is out of service to ensure it has adequate capability to perform all dredging normally accomplished by the McFARLAND. The Corps will monitor industry performance to make sure all maintenance dredging is accomplished and will consider this performance by industry in its review of the continuing replacement for the McFARLAND as part of the minimum dredge fleet. Even without the $8 million overhaul, the McFarland is still an effective hopper dredge capable of performing for many years to come. To tie up the vessel for a year would require laying off the entire crew. I do not feel this is prudent. There presently is not sufficient information to determine whether industry can meet all the dredging needs of the country. The 1978 law states that federal dredging will be moved to the private sector when the Secretary of the Army determines private industry has the capability to do such work and it can be done at reasonable prices in a timely manner. As the Acting Assistant Secretary previously stated, sufficient data are not available to make such a decision.

QUESTIONS SUBMITTED BY CONGRESSMAN CHAPMAN
NEW FLOOD CONTROL POLICY

Question. Dr. Zirschky, I have a number of questions regarding your new policy on Corps participation in flood control (national significance, i.e. waters from out of state, 2:1 benefit-to-cost ratio, and 75% local sponsor costs).

The proposal to only pursue flood control projects where more than 50% of the water comes from outside the state will drastically impact my state of Texas. Most rivers in Texas originate in the state and in cases where the rivers do not originate in Texas the state is so large that 50% of the waters that cause a flood on those rivers would probably not be from across state lines. When looking at this criteria, what rationale did you use for explaining an unfair impact this policy will cause for states like Texas and California?

Answer. In formulating the FY 96 budget request the Administration was faced with difficult choices. In keeping with the President's policy of returning to state and local government those Federal programs that can be more effectively performed at the state and local level, a portion of our program that is within the institutional capability of state and local government to perform was identified. Local flood protection projects are by their intra-state nature within the institutional capability of a state to implement. As a practical matter, however, I would envision that the Corps would be involved in only a limited number of new flood control projects in the future.

Question. Clearly a major flood to an area like Houston which has major industry, international trade, the ship channel, etc. would have a national impact. How do you explain that flood protection is not in the interest of the nation in an area like this?

Answer. The policy that we have set forth is that flood protection projects should be implemented at the lowest level of government that has the institutional capability. While flood protection in the aggregate is clearly in the nation's interest, choices for how to achieve protection, ranging from levee construction to protect existing development to improved flood plain management to prevent existing flood problems from becoming more severe, are within the responsibilities of states and local governments. We must make choices of what the Federal government can and should finance from the limited funds available. To help states and local governments carry out their responsibilities, we propose to fund the Planning Assistance to States and Tribes and Flood Plain Management Services programs at the full authorized level.

FLOOD RELIEF AND REPAIR

Question. It is my understanding that the Corps will continue to assist with flood relief and repair of flood damages. (For example if FEMA asks the Corps for help in responding to a local disaster issue.) Knowing that most Corps projects save taxpayers funds by protecting against costs of potential damages, why is it not in the interest of the nation to spend money to prevent costs of damages and yet under your policy it would be in the national interest to spend taxpayers money to pay for damages once they occur?

Answer. Flood protection in the aggregate is clearly in the long term interest of the nation. Our proposed policy does not change interest, but rather changes responsibility for implementation of a class of projects. Moreover, recognizing the hardships and financial drain caused by disasters we have not proposed any change in Corps assistance to states and localities in fighting and recovering from flood disasters. The funds requested for the Flood Control and Coastal Emergencies account are the full amount anticipated to be required, barring a major disaster. In that event we would as is the past seek a supplemental appropriation for the account.

CONTINUING AUTHORITIES PROGRAM

Question. Your budget continues to support funding for the continuing authorities program which includes small projects of limited scope in the areas of flood control, navigation, beach erosion, bank protection, snagging and clearing, etc. These projects are almost purely local in nature. How do you rationalize continuation of these local projects but not continuing a role in major flood control?

Answer. Despite the fact that the projects constructed under the continuing authorities program are highly valued by their beneficiaries, we cannot describe them as nationally significant. The funds requested for FY 1996, in combination with application of carryover funding from prior years, will enable us to meet our commitments to our sponsors, prepare for an orderly transition and initiate an orderly shutdown of the program.

IMPACT OF NEW POLICY ON FEASIBILITY STUDIES

Question: I understand your phase-out plan for this new policy provides for completion of the current phase of a project. What happens in the case where a local non-federal sponsor has contributed cost-sharing for a feasibility study that will now not meet the new criteria and thus be discontinued? Will there be any reimbursement or compensation?

Answer: A cost-shared study will be completed through to a Chief's Report or terminated in accordance with the terms of the Feasibility Cost-Sharing Agreement at the discretion of the sponsor. Since the product, including in particular the environmental impact statement incorporated in it, will have value to the sponsor in pursuing a flood protection project without Federal involvement, we are not proposing reimbursement or compensation to the sponsor.

LONG TERM IMPACT ON CORPS

Question. In proposing this policy, did the Corps do any studies or analysis as to the long-term impact this will have on the Corps? It would appear on the surface that this policy would for the most part put the Corps out of business.

Answer. While no detailed studies have been accomplished, we have examined our program into the future to the extent that we believe there will continue to be a viable program of study, design and construction of navigation improvements at the nation's coastal harbors and on the inland waterways. In addition, our program of operation and maintenance of existing projects will continue. While the Corps will be smaller both in dollars and FTE's in the future our program will continue.

ANALYSIS OF REQUIREMENTS

Question. The cost-sharing requirements in the 1986 Water Resources Act significantly reduced many communities ability to pursue Corps projects. In proposing this policy, did the Corps do any studies or analysis of the impact of imposing a 75% local cost-share?

Answer. No studies or analyses of the impact of 75% cost share have been performed.

Question. Has the Corps developed or submitted to Congress the legislative language required to make the change in cost-sharing requirements? If not, when will this be available?

Answer. The Army has not submitted to Congress the legislative language necessary to change the cost-sharing requirements for flood control projects to 75% non-Federal. We expect to have language to the authorizing committees soon.

Question. Does the 75% local cost-share proposal only apply to flood control or will your proposed legislative language require this cost-sharing arrangement for all projects?

Answer. The 75% cost-sharing by non-Federal sponsors would apply only to flood control projects.

Question. Dr. ZIRSCHKY, in your testimony you state that every dollar invested in new construction starts and major rehabilitation projects will result in $2.2 dollars in national economic benefit. How many of these new starts are flood control and do they all meet the new criteria of a 2-1 benefit-to-cost ratio?

Answer. Only one project, the Johnstown, PA Major Rehabilitation project, is for flood control and its benefit-to-cost ratio is 6.0 to 1, however the new policy does not apply to Major Rehabilitation projects.

DECLNE IN PRODUCTION CAPABILITY

Question. The testimony indicates that production capacity decreased by $300 million beginning in FY 93. You indicate there are a "number of reasons" but that morale due to restructuring was a significant factor. How did you measure that morale was a significant factor?

Answer. We did not do a scientific survey of the attitude of our civilian workforce but we have been able to make judgments based on observations by the collective Corps leadership. We have had hotline and other means whereby employees were able to express their views on a nonattribution basis. These communications taken along with observations during visits to the various divisions and districts reveal that most employees are concerned about their future.

Question. What were the other "number of reasons" for this decrease in production?

Answer. In addition to restructuring the reduction in employment in accordance with the Federal Workforce Restructuring Act of 1994 has caused the retirement of key personnel in a number of districts. The loss of these individuals has in some cases left less experienced personnel in charge of key activities which are on the critical path of projects. Also the Midwest flood of 1993 diverted a great deal of effort from the ongoing studies and projects to fight the flood and then the cleanup and rehabilitation in the aftermath.

Question. When did the Corps become aware of this problem?

Answer. At the end of fiscal year 1993 (October 1993) we saw the results.

Question. If this problem began in FY 93, was the Congress notified of the problem so we could adequately respond to this situation as we formulated your FY 94 budget? If not, why not?

Answer. The FY 94 appropriation bill was passed by the House on June 23, 1993 and the Senate on September 30, 1993. With our current financial system, when the House passed the bill we had not yet seen the financial reports for the 3rd quarter. The results of performance were displayed in the budget materials furnished to the Congress in connection with the FY 95 budget. Our FY 95 request recognized our FY 93 performance, which we believed to be an aberration after increasing levels of performance the prior three fiscal years. In hindsight, it was not an aberration and we should have made a greater adjustment to our FY 95 request.

NEW TECHNICAL REVIEW PROCESS AND NEW POLICY REVIEW PROCESS

QUESTION. Your testimony indicates you completed a new technical review process and a new policy review process. These were items that you indicated support for implementing last year. When were these restructuring activities completed?

What data do you have regarding whether this new review process is working? i.e. less number of studies going to Washington, etc.

ANSWER. The new review process has not been implemented. Proposals for new technical and policy review processes are under development. Therefore, no data is available to measure the performance of the new processes.

PUBLIC AWARENESS PLAN

Mr CHAPMAN. Dr Zirschky, on page 4 of your testimony you indicate that a public awareness plan has been prepared and implemented to increase the public awareness of the Corps' contributions to America. Has this plan been shared with the Congress?

Dr ZIRSCHKY The Public Awareness Plan is still in draft form although we have begun implementing elements of it The elements of the plan are very similar to previous annual plans for meeting the Department of Defense policy which ensures the availability of timely and accurate information. As we have been modifying our present plan, we have implemented the ongoing public affairs activities portion of the plan. This part addresses the providing of information to the news media and to Corps employees. The annual public affairs plans are not normally provided to Congress, although they certainly would be available on request after finalization

Mr CHAPMAN. How much was spent on this effort?

Dr ZIRSCHKY Modifying the present Public Affairs Plan allows us to re-prioritize Corps of Engineers Public Affairs staff's efforts to accomplish this activity within their normal operating budget and so, without allocating additional funds At this point in the plan preparation, we estimate that we have dedicated about 32 staff hours for a cost of about $1,450 Of this amount, about $265 was military funded Public Affairs Office staff time and the remaining amount covered civil funded staff's time

Mr CHAPMAN From which account did the funding for this initiative come?

Dr ZIRSCHKY Since the Corps Headquarters Public Affairs Office staff is developing the Public Awareness Plan, the civil portion is funded from the General Expenses appropriation; the military funded staff is paid from Operation and Maintenance, Army funds.

NATIONAL ASSESSMENT OF WATER SUPPLY DEMAND AND AVAILABILITIY

Question. Among the new surveys is a National Assessment of Water Supply Demand and Availability to help regional, state, and local governments plan for water supplies they will need in the future. Why is this effort that provides local benefit justified and flood control to help locals, which is an authorized purpose of the Corps, not? Under what authority is the Corps conducting this study?

Answer. The intent of the study is to conduct a nationwide assessment of water demand and availability for all significant water uses to the year 2025. We had not intended to limit the assessment only to municipal and industrial water supply, which is the conventional understanding of the term "water supply". The use of the phrase "water supply" is intended to include the current and future availability and use of freshwater supplies for all competing purposes. There has not been such an assessment since the Water Resources Council's Study of 1978. Since that time many changes in technology, laws, population redistribution and in environmental values have resulted in significant shifts in all water uses. We need to document those shifts and undertake a detailed accounting of all water uses so that the private sector and appropriate levels of government could better evaluate the likely future demands to better manage our Nation's existing scarce freshwater supplies - at the local, state and federal levels. The authorities are Section 707 and Section 729 of the Water Resources Development Act of 1986.

Question: General Williams, your testimony states that by FY 99 the Corps will have reduced its workforce by 12% but that further reductions of 9% will be required by 2000 due to the President's reinventing government initiative. How will you achieve an additional 9% reduction in one year when it will have taken several years to achieve a 12% reduction? Please outline your plan for workforce reductions for the record.

Answer: The 9 percent reduction is the total estimated additional reduction during the period from FY 96 to FY 2000, so it would not be taken all in one year. The reductions in FY 96 due to the proposed policies is 196 FTE. This is on top of the reductions mandated by the Federal Workforce Restructing Act.

(The information follows:)

Fiscal Year	Streamlining Plan Ceiling	Policy Changed Estimate	Change	%Change Annual	% Total
base 1993	29,194				
1994	28,482			2.4	2.4
1995	27,839			2.2	4.6
1996	27,555	27,359	196	1.7	6.3
1997	27,201	26,515	686	2.8	9.1
1998	26,559	25,316	1,243	4.2	13.3
1999	25,808	24,034	1,774	4.4	17.7
2000	25,808	23,226	2,582	2.7	20.4

INSTALLING ONE-STOP REVIEW

QUESTION. Your testimony indicates you are preparing to install one-stop technical reviews and streamline the study process. When will this take effect and are these efforts different from the technical and policy reviews that Dr. Zirschky testified are completed? (Zirschky oral testimony page 5)

ANSWER. Proposals for new technical and policy review processes are under development. A briefing will soon be scheduled to discuss the proposed new technical review process with the Secretary. The one-stop technical review to which I referred is the same as the one referred to in Dr. Zirschky's testimony. Streamlining the feasibility study process will involve optimization of the entire spectrum of activities involved in the formulation of projects, including project review.

QUESTIONS FOR THE RECORD FROM CONGRESSMAN BUNN

TERMINATION OF O&M AT HARBOR PROJECTS

Dr. Zirschky, the amounts included in the Corps FY 1996 budget for dredging ports in my state appear adequate to do the job. Yet, you propose a major policy change to terminate O&M dredging at most Oregon coastal ports.

Question. Am I correct that funds to pay for this dredging come from the Harbor Maintenance Trust Fund?

Answer. Yes, maintenance costs of all coastal harbors are paid for from the Harbor Maintenance Trust Fund (HMTF) up to the prorated amount available in the account. However, only vessels using deep draft harbors pay the Harbor Maintenance tax since the cost of collection at the shallow draft harbors would exceed the amount of revenues generated by minimal commercial use.

Question. In effect, they are user fees, paid by importers and exporters, is that not so? They're not funds appropriated from General Revenues are they?

Answer. Yes. The HMTF, as a user fee, is not derived from general revenues. The 1986 Water Resources Development Act, as amended, established an ad valorem fee to cover up to 100 percent of costs incurred by the Corps in support of commercial navigation. Shippers of all cargo transiting commercial harbors are subject to the ad valorem fee.

SURPLUS BALANCE IN THE HARBOR MAINTENANCE TRUST FUND

Question. Does the Harbor Maintenance Trust Fund have a substantial surplus which is growing?

Answer. The Trust Fund balance is showing the cumulative effect of delays in obtaining legislation that would have allowed a drawdown of the balance commensurate with revenues collected. The current rate of 0 125% *ad valorem* fee on commercial cargo value was authorized by Section 316 of WRDA 1990 effective January 1991 to fund 100% of the maintenance costs of commercial channels and harbors. In addition, the rate was developed to accommodate the National Oceanic and Atmospheric Administration's (NOAA) use of about $45 5 million annually to fund programs beneficial to the commercial navigation industry Proposed legislation for NOAA to use HMTF fees was delayed, but is still planned for submittal for FY 96 In addition, legislation to use up to $5 million from the HMTF for costs of administration of the Harbor Maintenance Fee was delayed for several years, this legislation was finally passed in the North American Free Trade Agreement Implementation Act of 1994 (P L 103-182, Sec 683) The cumulative effect of delays in obtaining authorizing legislation from FY 91 to FY 95 added approximately $50 million per year to the balance, which remained in the Trust Fund accruing interest. These legislative delays, coupled with optimistic outyear budgets that did not materialize, compounded by the interest earned, has created a surplus in the fund

HARBOR MAINTENANCE TRUST FUND
PORTS THAT DO NOT CONTRIBUTE

Question. Dr. Zirschky, how many ports currently being dredged by the Corps do not pay into the Harbor Maintenance Trust Fund?

Answer. There are almost 500 Federal navigation projects that do not pay into the Harbor Maintenance Trust Fund. Not all of these require annual dredging. Some are dredged intermittently.

Question. Are you proposing to terminate dredging at every one of them?

Answer. Yes. Out proposal is to seek sponsors who are willing to assume responsibility for maintenance of these hharbors Eventually, however, where sponsors are not forthcoming, federal dredging would cease.

Question. What is the current total dredging cost of dredging these smaller ports?

Answer. The average annual cost of maintaining these smaller ports, including dredging, surveys, breakwater and jetty repairs is about $60 million.

Question. What percentage of your total dredging funds (from the trust fund) are spent to dredge these smaller harbors?

Answer. Approximately 13 percent of the total annual cost of maintaining all harbors eligible for reimbursement from the Harbor Maintenance Trust Fund is attributed to maintaining the smaller coastal harbors.

Question. Will you provide this committee with a list of the ports which would lose O&M dredging as a result of your proposed policy change?

Answer. The Federal navigation projects that do not contribute to the Harbor Maintenance Trust Fund, and which, if no sponsor were willing to assume responsibility for maintenance, would therefore not be maintained by the Corps, are identified on the following list, which is preliminary, subject to further review:

CORPS OF ENGINEERS -- CIVIL
HARBORS NOT CONTRIBUTING TO THE HARBOR MAINTENANCE TRUST FUND

(Subject to revision as additional data become available)

State	Project Name
AL	Bayou Coden AL
AL	Bayou Labatre AL
AL	Bon Secour River AL
AL	Dauphin Isle Bay AL
AL	Dog And Fowl Rivers AL
AL	Fly Creek AL
AL	Perdido Pass Channel AL
AK	Bethel Small Boat Harbor AK
AK	Cordova Harbor AK
AK	Craig Harbor AK
AK	Dillingham Harbor AK
AK	Douglas Harbor AK
AK	Dry Pass AK
AK	Egegik River AK
AK	Elfin Cove AK
AK	Gastineau AK
AK	Juneau Harbor AK
AK	Ninilchik Harbor AK
AK	Nome Harbor AK
AK	Pelican Harbor AK
AK	Port Lions AK
AK	Rocky Pass In Keku Strait AK
AK	Stikine River AK
AK	Valdez Harbor AK
AK	Wrangell Harbor AK
AS	Auasi Sbh Am Samoa
AS	Aunuu Harbor AS
AS	Tau Harbor AS
CA	Berkley Marina CA
CA	Bodega Bay CA
CA	Dana Point Harbor CA
CA	Fishermans Wharf Area CA
CA	Half Moon Bay Harbor CA
CA	Larkspur Ferry Naviagation Channel
CA	Los Angles River Estuary CA
CA	Marina Del Ray CA
CA	Monterey Harbor CA
CA	Newport Harbor CA
CA	Noyo River Harbor CA
CA	Oceanside Experimental Sand Bypass System CA
CA	Oceanside Harbor CA
CA	Petaluma River CA
CA	Redondo Beach King Harbor CA
CA	Sacromento River Shallow Draft Channel CA
CA	San Diego Miss Bay CA
CA	San Leandro Marina CA
CA	San Rafael Creek CA
CA	Santa Barbara Harbor CA
CA	Santa Cruz Harbor CA
CT	Branford Harbor CT
CT	Clinton Harbor CT
CT	Greenwich Harbor CT
CT	Guilford Harbor CT
CT	Mianus River CT
CT	Milford Harbor CT
CT	North Cove CT
CT	Norwalk Harbor CT
CT	Patchogue River CT
CT	Southport Harbor CT
CT	Stonington Harbor CT
CT	Stony Creek Branford CT
CT	Westcott Cove CT
CT	Westport Harbor & Saugatuck River
DE	Broad Creek River DE
DE	Cedar Creek DE
DE	Indian River Inlet and Bay DE
DE	Inland Waterway Rehoboth Bay To Delaware Bay DE
DE	Little River DE
DE	Mispillion River DE
DE	Murderkill River DE
DE	Pepper Creek DE
DE	Waterway From Indian River To Rehobeth DE
DC	Anacostia River Basin DC & MD
FL	Anclote River FL

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AL	Bayou Coden AL
AL	Bayou Labatre AL
AL	Bon Secour River AL
AL	Dauphin Isle Bay AL
AL	Dog And Fowl Rivers AL
AL	Fly Creek AL
AL	Perdido Pass Channel AL
AK	Bethel Small Boat Harbor AK
AK	Cordova Harbor AK
AK	Craig Harbor AK
AK	Dillingham Harbor AK
AK	Douglas Harbor AK
AK	Dry Pass AK
AK	Egegik River AK
AK	Elfin Cove AK
AK	Gastineau AK
AK	Juneau Harbor AK
AK	Ninilchik Harbor AK
AK	Nome Harbor AK
AK	Pelican Harbor AK
AK	Port Lions AK
AK	Rocky Pass In Keku Strait AK
AK	Stikine River AK
AK	Valdez Harbor AK
AK	Wrangell Harbor AK
AS	Auasi Sbh Am Samoa
AS	Aunuu Harbor AS
AS	Tau Harbor AS
CA	Berkley Marina CA
CA	Bodega Bay CA
CA	Dana Point Harbor CA
CA	Fishermans Wharf Area CA
CA	Half Moon Bay Harbor CA
CA	Larkspur Ferry Naviagation Channel
CA	Los Angles River Estuary CA
CA	Marina Del Ray CA
CA	Monterey Harbor CA
CA	Newport Harbor CA
CA	Noyo River Harbor CA
CA	Oceanside Experimental Sand Bypass System CA
CA	Oceanside Harbor CA
CA	Petaluma River CA
CA	Redondo Beach King Harbor CA
CA	Sacromento River Shallow Draft Channel CA
CA	San Diego Miss Bay CA
CA	San Leandro Marina CA
CA	San Rafael Creek CA
CA	Santa Barbara Harbor CA
CA	Santa Cruz Harbor CA
CT	Branford Harbor CT
CT	Clinton Harbor CT
CT	Greenwich Harbor CT
CT	Guilford Harbor CT
CT	Mianus River CT
CT	Milford Harbor CT
CT	North Cove CT
CT	Norwalk Harbor CT
CT	Patchogue River CT
CT	Southport Harbor CT
CT	Stonington Harbor CT
CT	Stony Creek Branford CT
CT	Westcott Cove CT
CT	Westport Harbor & Saugatuck River
DE	Broad Creek River DE
DE	Cedar Creek DE
DE	Indian River Inlet and Bay DE
DE	Inland Waterway Rehoboth Bay To Delaware Bay DE
DE	Little River DE
DE	Mispillion River DE
DE	Murderkill River DE
DE	Pepper Creek DE
DE	Waterway From Indian River To Rehobeth DE
DC	Anacostia River Basin DC & MD
FL	Anclote River FL

CORPS OF ENGINEERS -- CIVIL
HARBORS NOT CONTRIBUTING TO THE HARBOR MAINTENANCE TRUST FUND

(Subject to revision as additional data become available)

State	Project Name
FL	Apalachicola Bay FL
FL	Bakers Haulover Inlet FL
FL	Blackwater River FL
FL	Carrabelle Harbor FL
FL	Channel Naples-Big Marco Pass FL
FL	Choctawhatchee River Fl AL
FL	Clearwater Pass FL
FL	East Pass Channel FL
FL	Eau Gallie Harbor FL
FL	Escambia-Conecuh River FL AL
FL	Fort Myers Beach FL
FL	Grand Lagoon FL
FL	Holmes Creek FL
FL	Inland Waterway Caloosahatchee River To Anclolte River FL
FL	Johns Pass Pinellas FL
FL	La Grange Bayou FL
FL	Longboat Pass FL
FL	Melbourne Harbor FL
FL	New Pass Sarasota FL
FL	Okeechobee Waterway FL
FL	Oklawaha River FL
FL	Panacea Harbor FL
FL	Ponce De Leon Inlet FL
FL	St Augustine Harbor FL
FL	St Marks River FL
FL	St. Johns River -- Jacksonville To Lake Harvey FL
FL	St. Lucie Inlet FL
FL	Withlacoochie River FL
GA	Atamaha-Oconee and Ocumulgee Rivers GA
GA	Satilla River GA
GA	Savannah River Below Augusta, GA & SC
GU	Agana Small Boat Harbor GU
HI	Haleiwa Small Boat Harbor HI
HI	Manele Small Boat Harbor HI
HI	Waianae Boat Harbor HI
IN	Burns Waterway Small Boat Harbor
ME	Bagaduce River ME
ME	Bass Harbor Bar ME
ME	Bass Harbor ME
ME	Beals Harbpr ME
ME	Boothbay Harbor ME
ME	Bucks Harbor, Machiasport ME
ME	Bunker Harbor ME
ME	Camden Harbor ME
ME	Carver's Harbor ME
ME	Cathance River ME
ME	Corea Harbor ME
ME	Damaristcotta River ME
ME	East Boothbay Harbor ME
ME	Frenchboro Harbor ME
ME	Georges River ME
ME	Hendricks Harbor ME
ME	Isle Au Haut Thoroughfare ME
ME	Jonesport Harbor ME
ME	Josias River ME
ME	Kennebunk River ME
ME	Lubec Channel ME
ME	Machias River ME
ME	Medomak River ME
ME	Moosabec Bar ME
ME	Narraguagus River ME
ME	New Harbor ME
ME	Northeast Harbor
ME	Owl's Head Harbor
ME	Pepperell Cove ME
ME	Pig Island Gut ME
ME	Richmond Harbor ME
ME	Rockport Harbor ME
ME	Royal River ME
ME	Saco River ME
ME	Sasanoa River ME
ME	Scarboro River ME
ME	South Bristol Harbor ME
ME	Southwest Harbor ME

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FL	Carrabelle Harbor FL
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FL	Clearwater Pass FL
FL	East Pass Channel FL
FL	Eau Gallie Harbor FL
FL	Escambia-Conecuh River FL AL
FL	Fort Myers Beach FL
FL	Grand Lagoon FL
FL	Holmes Creek FL
FL	Inland Waterway Caloosahatchee River To Anclolte River FL
FL	Johns Pass Pinellas FL
FL	La Grange Bayou FL
FL	Longboat Pass FL
FL	Melbourne Harbor FL
FL	New Pass Sarasota FL
FL	Okeechobee Waterway FL
FL	Oklawaha River FL
FL	Panacea Harbor FL
FL	Ponce De Leon Inlet FL
FL	St Augustine Harbor FL
FL	St Marks River FL
FL	St. Johns River -- Jacksonville To Lake Harvey FL
FL	St. Lucie Inlet FL
FL	Withlacoochie River FL
GA	Atamaha-Oconee and Ocumulgee Rivers GA
GA	Satilla River GA
GA	Savannah River Below Augusta, GA & SC
GU	Agana Small Boat Harbor GU
HI	Haleiwa Small Boat Harbor HI
HI	Manele Small Boat Harbor HI
HI	Waianae Boat Harbor HI
IN	Burns Waterway Small Boat Harbor
ME	Bagaduce River ME
ME	Bass Harbor Bar ME
ME	Bass Harbor ME
ME	Beals Harbpr ME
ME	Boothbay Harbor ME
ME	Bucks Harbor, Machiasport ME
ME	Bunker Harbor ME
ME	Camden Harbor ME
ME	Carver's Harbor ME
ME	Cathance River ME
ME	Corea Harbor ME
ME	Damaristcotta River ME
ME	East Boothbay Harbor ME
ME	Frenchboro Harbor ME
ME	Georges River ME
ME	Hendricks Harbor ME
ME	Isle Au Haut Thoroughfare ME
ME	Jonesport Harbor ME
ME	Josias River ME
ME	Kennebunk River ME
ME	Lubec Channel ME
ME	Machias River ME
ME	Medomak River ME
ME	Moosabec Bar ME
ME	Narraguagus River ME
ME	New Harbor ME
ME	Northeast Harbor
ME	Owl's Head Harbor
ME	Pepperell Cove ME
ME	Pig Island Gut ME
ME	Richmond Harbor ME
ME	Rockport Harbor ME
ME	Royal River ME
ME	Saco River ME
ME	Sasanoa River ME
ME	Scarboro River ME
ME	South Bristol Harbor ME
ME	Southwest Harbor ME

CORPS OF ENGINEERS -- CIVIL

HARBORS NOT CONTRIBUTING TO THE HARBOR MAINTENANCE TRUST FUND

(Subject to revision as additional data become available)

State	Project Name
ME	Stonington Harbor ME
ME	St. Croix River ME
ME	Union Harbor ME
ME	Wells Harbor ME
ME	Winter Harbor ME
ME	Wood Island Harbor ME
ME	York Harbor ME
MD	Annapolis Harbor MD
MD	Back Creek MD
MD	Black Walnut Harbor MD
MD	Broad Creek MD
MD	Chester River MD
MD	Choptank River MD
MD	Claiborne Harbor MD
MD	Corsica River MD
MD	Crisfield Harbor MD
MD	Cypress Creek MD
MD	Duck Point Cove MD
MD	Elk & Little Elk Rivers MD
MD	Fishing Bay MD
MD	Fishing Creek MD
MD	Goose Creek MD
MD	Herring Bay and Rockhold Creek
MD	Herring Creek MD
MD	Herring Creek Tall Timbers MD
MD	Honga River Tar Bay MD
MD	Island Creek MD
MD	Island Creek St. George Island MD
MD	Knapps Narrows MD
MD	La Trappe River MD
MD	Little Creek Kent Is MD
MD	Lower Thoroughfair at or near Wenona Deal Island MD
MD	Lowes Wharf MD
MD	Madison Bay MD
MD	MiddleRiver And Dark Head Creek
MD	Muddy Hook/Tyler Coves MD
MD	Nan Cove MD
MD	Nanticoke River At Bivalve MD
MD	Nanticoke River DE & MD
MD	Nanticoke River & Tributaries, DE & MD
MD	Neale Sound MD
MD	Neavitt Harbor MD
MD	Northeast River MD
MD	Ocean City Harbor And Inlet and Sineputuxent Bay MD
MD	Parish Creek MD
MD	Pocomoke River MD
MD	Potomac River Lower Ceder Point
MD	Queenstown Harbor MD
MD	Rhodes Point To Tylerton MD
MD	Rock Hall Harbor MD
MD	Shallow Creek MD
MD	Slaughter Creek MD
MD	Smith Creek MD
MD	St. Catherine Sd MD
MD	St. Jerome Creek MD
MD	St. Michaels MD
MD	St. Patricks Creek MD
MD	St. Peters Creek MD
MD	Tilghman Is Harbor MD
MD	Town Creek MD
MD	Tred Avon River MD
MD	Tuckahoe River MD
MD	Twitch Cove Channel Big Thoroughfare River MD
MD	Upper Thoroughfare Deal Island MD
MD	Warwick River MD
MD	Wicomico River MD
MA	Andrews River MA
MA	Aunt Lydias Cove MA
MA	Buttermilk Bay Channel MA
MA	Chatham (Stage) Harbor MA
MA	Cohasset Harbor MA
MA	Cuttyhunk Harbor MA
MA	Duxbury Harbor MA
MA	Essex River MA

CORPS OF ENGINEERS -- CIVIL

HARBORS NOT CONTRIBUTING TO THE HARBOR MAINTENANCE TRUST FUND

(Subject to revision as additional data become available)

State	Project Name
ME	Stonington Harbor ME
ME	St. Croix River ME
ME	Union Harbor ME
ME	Wells Harbor ME
ME	Winter Harbor ME
ME	Wood Island Harbor ME
ME	York Harbor ME
MD	Annapolis Harbor MD
MD	Back Creek MD
MD	Black Walnut Harbor MD
MD	Broad Creek MD
MD	Chester River MD
MD	Choptank River MD
MD	Claiborne Harbor MD
MD	Corsica River MD
MD	Crisfield Harbor MD
MD	Cypress Creek MD
MD	Duck Point Cove MD
MD	Elk & Little Elk Rivers MD
MD	Fishing Bay MD
MD	Fishing Creek MD
MD	Goose Creek MD
MD	Herring Bay and Rockhold Creek
MD	Herring Creek MD
MD	Herring Creek Tall Timbers MD
MD	Honga River Tar Bay MD
MD	Island Creek MD
MD	Island Creek St. George Island MD
MD	Knapps Narrows MD
MD	La Trappe River MD
MD	Little Creek Kent Is MD
MD	Lower Thoroughfair at or near Wenona Deal Island MD
MD	Lowes Wharf MD
MD	Madison Bay MD
MD	MiddleRiver And Dark Head Creek
MD	Muddy Hook/Tyler Coves MD
MD	Nan Cove MD
MD	Nanticoke River At Bivalve MD
MD	Nanticoke River DE & MD
MD	Nanticoke River & Tributaries, DE & MD
MD	Neale Sound MD
MD	Neavitt Harbor MD
MD	Northeast River MD
MD	Ocean City Harbor And Inlet and Sineputuxent Bay MD
MD	Parish Creek MD
MD	Pocomoke River MD
MD	Potomac River Lower Ceder Point
MD	Queenstown Harbor MD
MD	Rhodes Point To Tylerton MD
MD	Rock Hall Harbor MD
MD	Shallow Creek MD
MD	Slaughter Creek MD
MD	Smith Creek MD
MD	St. Catherine Sd MD
MD	St. Jerome Creek MD
MD	St. Michaels MD
MD	St. Patricks Creek MD
MD	St. Peters Creek MD
MD	Tilghman Is Harbor MD
MD	Town Creek MD
MD	Tred Avon River MD
MD	Tuckahoe River MD
MD	Twitch Cove Channel Big Thoroughfare River MD
MD	Upper Thoroughfare Deal Island MD
MD	Warwick River MD
MD	Wicomico River MD
MA	Andrews River MA
MA	Aunt Lydias Cove MA
MA	Buttermilk Bay Channel MA
MA	Chatham (Stage) Harbor MA
MA	Cohasset Harbor MA
MA	Cuttyhunk Harbor MA
MA	Duxbury Harbor MA
MA	Essex River MA

CORPS OF ENGINEERS -- CIVIL
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(Subject to revision as additional data become available)

State	Project Name
MA	Falmouth Harbor MA
MA	Green Harbor MA
MA	Hyannis Harbor MA
MA	Little Harbor Woods Hole MA
MA	Menemsha Creek Martha's Vineyard
MA	Merrimack River MA
MA	Newburyport Harbor MA
MA	Plymouth Harbor MA
MA	Provincetown Harbor MA
MA	Rockport Harbor & Pigeon Cove
MA	Scituate Harbor MA
MA	Sesuit Harbor MA
MA	Wellfleet Harbor MA
MA	Woods Hole Channel MA
MI	Arcadia Harbor MI
MI	Au Sable Harbor MI
MI	Bay Port Harbor MI
MI	Belle River
MI	Big Bay Harbor MI
MI	Black River Upper Peninsula MI
MI	Black River (Port Huron) MI
MI	Bolles Harbor MI
MI	Caseville Harbor MI
MI	Clinton River MI
MI	Detour Harbor MI
MI	Eagle Harbor MI
MI	Grand Marias Harbor MI
MI	Grand Traverse Harbor MI
MI	Greilickville Harbor (Traverse City Harbor) MI
MI	Hammond Bay Harbor MI
MI	Harrisville Harbor MI
MI	Inland Route Michigan MI
MI	Lac La Belle Harbor MI
MI	Leland Harbor MI
MI	Les Cheneaux Islands Channels MI
MI	Lexington Harbor MI
MI	Little Lake Harbor MI
MI	Mackinac Island Harbor MI
MI	New Buffalo Harbor MI
MI	Pentwater Harbor MI
MI	Petoskey Harbor MI
MI	Pine River MI
MI	Point Lookout Harbor MI
MI	Port Austin Harbor MI
MI	Port Sanilac Harbor MI
MI	Portage Lake Harbor MI
MI	Saugatuck Harbor MI
MI	South Haven MI
MI	St James Harbor MI
MI	St Joseph River MI
MI	Tawas Bay Harbor MI
MI	White Lake Harbor MI
MI	Whitefish Pointe Harbor MI
MN	Grand Marias Harbor MN
MN	Knife River Harbor MN
MN	Zippel Bay Small Boat Harbor MN
MS	Biloxi Harbor MS
MS	Bluff Creek MS
MS	Cadet Bayou MS
MS	Noxubee River MS
MS	Pascagoula River MS
MS	Pass Christian Harbor MS
MS	Port Bienville MS
NH	Bellamy River NH
NH	Cocheco River NH
NH	Exeter River NH
NH	Hampton Harbor NH
NH	Lamprey River NH
NH	Rye Harbor NH
NH	Winnipesaukee Lake NH
NJ	Absecon Creek NJ
NJ	Alloway Creek NJ
NJ	Barnegat Inlet NJ
NJ	Big Timber Creek NJ
NJ	Cheesequake Creek NJ
NJ	Cohansey River NJ
NJ	Cooper River NJ

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(Subject to revision as additional data become available)

State	Project Name
MA	Falmouth Harbor MA
MA	Green Harbor MA
MA	Hyannis Harbor MA
MA	Little Harbor Woods Hole MA
MA	Menemsha Creek Martha's Vineyard
MA	Merrimack River MA
MA	Newburyport Harbor MA
MA	Plymouth Harbor MA
MA	Provincetown Harbor MA
MA	Rockport Harbor & Pigeon Cove
MA	Scituate Harbor MA
MA	Sesuit Harbor MA
MA	Wellfleet Harbor MA
MA	Woods Hole Channel MA
MI	Arcadia Harbor MI
MI	Au Sable Harbor MI
MI	Bay Port Harbor MI
MI	Belle River
MI	Big Bay Harbor MI
MI	Black River Upper Peninsula MI
MI	Black River (Port Huron) MI
MI	Bolles Harbor MI
MI	Caseville Harbor MI
MI	Clinton River MI
MI	Detour Harbor MI
MI	Eagle Harbor MI
MI	Grand Marias Harbor MI
MI	Grand Traverse Harbor MI
MI	Greilickville Harbor (Traverse City Harbor) MI
MI	Hammond Bay Harbor MI
MI	Harrisville Harbor MI
MI	Inland Route Michigan MI
MI	Lac La Belle Harbor MI
MI	Leland Harbor MI
MI	Les Cheneaux Islands Channels MI
MI	Lexington Harbor MI
MI	Little Lake Harbor MI
MI	Mackinac Island Harbor MI
MI	New Buffalo Harbor MI
MI	Pentwater Harbor MI
MI	Petoskey Harbor MI
MI	Pine River MI
MI	Point Lookout Harbor MI
MI	Port Austin Harbor MI
MI	Port Sanilac Harbor MI
MI	Portage Lake Harbor MI
MI	Saugatuck Harbor MI
MI	South Haven MI
MI	St James Harbor MI
MI	St Joseph River MI
MI	Tawas Bay Harbor MI
MI	White Lake Harbor MI
MI	Whitefish Pointe Harbor MI
MN	Grand Marias Harbor MN
MN	Knife River Harbor MN
MN	Zippel Bay Small Boat Harbor MN
MS	Biloxi Harbor MS
MS	Bluff Creek MS
MS	Cadet Bayou MS
MS	Noxubee River MS
MS	Pascagoula River MS
MS	Pass Christian Harbor MS
MS	Port Bienville MS
NH	Bellamy River NH
NH	Cocheco River NH
NH	Exeter River NH
NH	Hampton Harbor NH
NH	Lamprey River NH
NH	Rye Harbor NH
NH	Winnipesaukee Lake NH
NJ	Absecon Creek NJ
NJ	Alloway Creek NJ
NJ	Barnegat Inlet NJ
NJ	Big Timber Creek NJ
NJ	Cheesequake Creek NJ
NJ	Cohansey River NJ
NJ	Cooper River NJ

CORPS OF ENGINEERS -- CIVIL
HARBORS NOT CONTRIBUTING TO THE HARBOR MAINTENANCE TRUST FUND

(Subject to revision as additional data become available)

State	Project Name
NJ	Keyport Harbor NJ
NJ	Manasquan River NJ
NJ	Matawan Creek NJ
NJ	Maurice River NJ
NJ	New Jersey Inland Waterway
NJ	Raccoon Creek NJ
NJ	Salem River NJ
NJ	Sandy Hook Bay At Leona NJ
NJ	Sandy Hook Bay NJ
NJ	Shark River NJ
NJ	Shoal Harbor Cmptn Creek NJ
NJ	Shrewsbury River NJ
NJ	Tuckerton Creek NJ
NY	Barcelona Harbor NY
NY	Bronx River NY
NY	Brown Creek NY
NY	Cape Vincent Harbor NY
NY	Cattaraugus Creek NY
NY	Coney Island Creek NY
NY	East Chester Creek NY
NY	East Rockaway Inlet NY
NY	Echo Bay Harbor NY
NY	Fire Island Inlet To Jones Beach NY
NY	Fire Island Inlt NY
NY	Glen Cove Creek NY
NY	Great South Bay NY
NY	Hay (West) Harbor Fishers Island
NY	Hempstead Harbor NY
NY	Huntington Harbor NY
NY	Irondequoit Bay NY
NY	Jones Inlet NY
NY	Lake Montauk Harbor NY
NY	Little River NY
NY	Little Sodus Bay Harbour NY
NY	Long Island Intracoastal Waterway
NY	Mamaroneck Harbor NY
NY	Mattituck Harbor NY
NY	Milton Harbor NY
NY	Morristown Harbor NY
NY	Narrows of Lake Champlain, NY & VT
NY	New Rochelle Harbor NY
NY	Niagara River NY
NY	Northport Harbor NY
NY	Oak Orchard Harbor NY
NY	Olcott Harbor NY
NY	Plattsburgh Harbor NY
NY	Port Chester Harbor NY
NY	Port Ontario Harbor NY
NY	Rondout Harbor NY
NY	Sackets Harbor NY
NY	Saugerties Harbor NY
NY	Sheepshead Bay NY
NY	Shinnecock Inlet NY
NY	Sturgeon Point NY
NY	Tarrytown Harbor NY
NY	Westchester Creek NY
NY	Wilson Harbor NY
NC	Atlantic Beach Channels NC
NC	Avon Harbor NC
NC	Bay River NC
NC	Belhaven Harbor NC
NC	Black River NC
NC	Cashie River NC
NC	Channel Connecting Thoroughfare Bay With Cedar Bay NC
NC	Channel From Back Sound Lookout Bight NC
NC	Channel From Pamlico Sound To Rodanthe NC
NC	Chowan River NC
NC	Contentnea Creek NC
NC	Drum Inlet NC
NC	Edenton Harbor NC
NC	Far Creek NC
NC	Fishing Creek NC
NC	Knobbs Creek NC
NC	Lockwood Folly River NC

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(Subject to revision as additional data become available)

State	Project Name
NJ	Keyport Harbor NJ
NJ	Manasquan River NJ
NJ	Matawan Creek NJ
NJ	Maurice River NJ
NJ	New Jersey Inland Waterway
NJ	Raccoon Creek NJ
NJ	Salem River NJ
NJ	Sandy Hook Bay At Leona NJ
NJ	Sandy Hook Bay NJ
NJ	Shark River NJ
NJ	Shoal Harbor Cmptn Creek NJ
NJ	Shrewsbury River NJ
NJ	Tuckerton Creek NJ
NY	Barcelona Harbor NY
NY	Bronx River NY
NY	Brown Creek NY
NY	Cape Vincent Harbor NY
NY	Cattaraugus Creek NY
NY	Coney Island Creek NY
NY	East Chester Creek NY
NY	East Rockaway Inlet NY
NY	Echo Bay Harbor NY
NY	Fire Island Inlet To Jones Beach NY
NY	Fire Island Inlt NY
NY	Glen Cove Creek NY
NY	Great South Bay NY
NY	Hay (West) Harbor Fishers Island
NY	Hempstead Harbor NY
NY	Huntington Harbor NY
NY	Irondequoit Bay NY
NY	Jones Inlet NY
NY	Lake Montauk Harbor NY
NY	Little River NY
NY	Little Sodus Bay Harbour NY
NY	Long Island Intracoastal Waterway
NY	Mamaroneck Harbor NY
NY	Mattituck Harbor NY
NY	Milton Harbor NY
NY	Morristown Harbor NY
NY	Narrows of Lake Champlain, NY & VT
NY	New Rochelle Harbor NY
NY	Niagara River NY
NY	Northport Harbor NY
NY	Oak Orchard Harbor NY
NY	Olcott Harbor NY
NY	Plattsburgh Harbor NY
NY	Port Chester Harbor NY
NY	Port Ontario Harbor NY
NY	Rondout Harbor NY
NY	Sackets Harbor NY
NY	Saugerties Harbor NY
NY	Sheepshead Bay NY
NY	Shinnecock Inlet NY
NY	Sturgeon Point NY
NY	Tarrytown Harbor NY
NY	Westchester Creek NY
NY	Wilson Harbor NY
NC	Atlantic Beach Channels NC
NC	Avon Harbor NC
NC	Bay River NC
NC	Belhaven Harbor NC
NC	Black River NC
NC	Cashie River NC
NC	Channel Connecting Thoroughfare Bay With Cedar Bay NC
NC	Channel From Back Sound Lookout Bight NC
NC	Channel From Pamlico Sound To Rodanthe NC
NC	Chowan River NC
NC	Contentnea Creek NC
NC	Drum Inlet NC
NC	Edenton Harbor NC
NC	Far Creek NC
NC	Fishing Creek NC
NC	Knobbs Creek NC
NC	Lockwood Folly River NC

CORPS OF ENGINEERS -- CIVIL
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(Subject to revision as additional data become available)

State	Project Name
NC	Mackay Creek NC
NC	Manteo Shallowbag Bay NC
NC	Masonboro Inlet & Connecting Channels NC
NC	Neuse River NC
NC	Newbegun Creek NC
NC	Northeast Cape Fear River NC
NC	Ocracoke Inlet NC
NC	Pamlico & Tar River NC
NC	Pembroke Creek NC
NC	Perquimans River NC
NC	Roanoke River NC
NC	Rollinson Channel NC
NC	Scuppernong River NC
NC	Shallotte River NC
NC	Silver Lake Harbor NC
NC	Smiths Creek (Wilmington County)
NC	Smiths Creek (Pamlico County) NC
NC	South River NC
NC	Stumpy Point Bay NC
NC	Swift Creek NC
NC	Trent River NC
NC	Wallace Channel NC
NC	Waterway Connecting Pamlico Sound & Beauford Harbor NC
NC	Waterway Connecting Swan Quarter Bay to Deep Bay NC
NC	Wrights Creek NC
OH	Kelley's Island Harbor OH
OH	Port Clinton Harbor OH
OH	Put-In-Bay Harbor OH
OH	Rocky River Harbor OH
OH	Vermillion Harbor OH
OH	West Harbor OH
OR	Chetco River OR
OR	Clatskania River OR
OR	Columbia River Baker Bay OR
OR	Columbia River Between Chinook & Sand Island OR
OR	Coos & Millicoma Rivers OR
OR	Coquille River OR
OR	Depoe Bay OR
OR	Nehalem Bay OR
OR	Rogue River Harbor Gold Bay Harbor OR
OR	Smith River OR
OR	Yaquina River OR
OR	Young Bay & River OR
RI	Bullocks Pt Cove RI
RI	Greenwich Bay RI
RI	Little Narragansett BAY
RI	Pawcatuck River RI & CT
RI	Pawtuxet Cove RI
SC	Adams Creek SC
SC	Archers Creek SC
SC	Brookgreen Garden Canal SC
SC	Edisto River SC
SC	Folly River SC
SC	Great Pee Dee River SC
SC	Jeremy Creek SC
SC	Little River Inlet SC
SC	Lynches River SC
SC	Mingo Creek SC
SC	Murrells Inlet SC
SC	Salkehatchie River SC
SC	Santee River SC
SC	Town Creek SC
SC	Village Creek SC
SC	Waccamaw River SC
SC	Wateree River SC
TX	Cedar Bayou TX
TX	Clear Creek And Lake TX
TX	Double Bayou TX
TX	Little Bay TX
TX	Oyster Creek TX
TX	Trinity River TX
VT	Burlington Harbor VT
VA	Appomattox River VA

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State	Project Name
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NC	Manteo Shallowbag Bay NC
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NC	Neuse River NC
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NC	Northeast Cape Fear River NC
NC	Ocracoke Inlet NC
NC	Pamlico & Tar River NC
NC	Pembroke Creek NC
NC	Perquimans River NC
NC	Roanoke River NC
NC	Rollinson Channel NC
NC	Scuppernong River NC
NC	Shallotte River NC
NC	Silver Lake Harbor NC
NC	Smiths Creek (Wilmington County)
NC	Smiths Creek (Pamlico County) NC
NC	South River NC
NC	Stumpy Point Bay NC
NC	Swift Creek NC
NC	Trent River NC
NC	Wallace Channel NC
NC	Waterway Connecting Pamlico Sound & Beauford Harbor NC
NC	Waterway Connecting Swan Quarter Bay to Deep Bay NC
NC	Wrights Creek NC
OH	Kelley's Island Harbor OH
OH	Port Clinton Harbor OH
OH	Put-In-Bay Harbor OH
OH	Rocky River Harbor OH
OH	Vermillion Harbor OH
OH	West Harbor OH
OR	Chetco River OR
OR	Clatskania River OR
OR	Columbia River Baker Bay OR
OR	Columbia River Between Chinook & Sand Island OR
OR	Coos & Millicoma Rivers OR
OR	Coquille River OR
OR	Depoe Bay OR
OR	Nehalem Bay OR
OR	Rogue River Harbor Gold Bay Harbor OR
OR	Smith River OR
OR	Yaquina River OR
OR	Young Bay & River OR
RI	Bullocks Pt Cove RI
RI	Greenwich Bay RI
RI	Little Narragansett BAY
RI	Pawcatuck River RI & CT
RI	Pawtuxet Cove RI
SC	Adams Creek SC
SC	Archers Creek SC
SC	Brookgreen Garden Canal SC
SC	Edisto River SC
SC	Folly River SC
SC	Great Pee Dee River SC
SC	Jeremy Creek SC
SC	Little River Inlet SC
SC	Lynches River SC
SC	Mingo Creek SC
SC	Murrells Inlet SC
SC	Salkehatchie River SC
SC	Santee River SC
SC	Town Creek SC
SC	Village Creek SC
SC	Waccamaw River SC
SC	Wateree River SC
TX	Cedar Bayou TX
TX	Clear Creek And Lake TX
TX	Double Bayou TX
TX	Little Bay TX
TX	Oyster Creek TX
TX	Trinity River TX
VT	Burlington Harbor VT
VA	Appomattox River VA

CORPS OF ENGINEERS -- CIVIL
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(Subject to revision as additional data become available)

State	Project Name
VA	Aquia Creek VA
VA	Bonum Creek VA
VA	Branson Cove VA
VA	Broad Creek VA
VA	Chincoteague Bay VA
VA	Chincoteague Harbor of Refuge VA
VA	Chincoteague Inlet VA
VA	Cranes Creek VA
VA	Deep Creek Newport News VA
VA	Greenvale Creek , Lane Co VA
VA	Hampton Creek VA
VA	Horn Harbor VA
VA	Hoskins Creek VA
VA	Lafayette River VA
VA	Little Machipongo River VA
VA	Little Wicomico River VA
VA	Lower Machedoc Creek VA
VA	Lynnhaven Inlet VA
VA	Meherrin River VA
VA	Monroe Bay Creek VA
VA	Nansemond River VA
VA	Neabsco Creek VA
VA	Newport News Creek VA
VA	Nomini Bay Creek VA
VA	Nottoway River VA
VA	Occoquan Creek VA
VA	Oyster Creek VA
VA	Parker Creek VA
VA	Potomac River Mt Veron VA
VA	Queens Creek VA
VA	Quinby Creek VA
VA	Rappahannock River VA
VA	Rudee Inlet VA
VA	Starlings Creek VA
VA	Tangier Channel VA
VA	Tylers Beach Channel VA
VA	Upper Machodoc Creek VA
VA	Waterway Coast Of VA
VA	Whitings Creek, Middlesex County
VA	Winter Harbor VA
WA	Anacortes WA
WA	Bay Center BB WA
WA	Blaine River WA
WA	Cowlitz River WA
WA	Deep River WA
WA	Edmonds Harbor WA
WA	Elochman Slough WA
WA	Friday Harbor WA
WA	Grays River WA
WA	Hammersley Inlet WA
WA	Kingston Harbor WA
WA	Lake River WA
WA	Lewis River WA
WA	Mats Mats Bay WA
WA	Nachotta BB WA
WA	Neah BAY
WA	Olympia East Bay Marina WA
WA	Port Townsend Harbor WA
WA	Quillayute River WA
WA	Skamokawa Creek WA
WA	Swinomish Channel WA
WI	Algoma Harbor WI
WI	Bayfield Harbor WI
WI	Big Suamico Harbor WI
WI	Cornucopia Harbor WI
WI	Fox River WI
WI	La Pointe Harbor WI
WI	Pensaukee Harbor WI
WI	Saxon Harbor WI

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State	Project Name
VA	Aquia Creek VA
VA	Bonum Creek VA
VA	Branson Cove VA
VA	Broad Creek VA
VA	Chincoteague Bay VA
VA	Chincoteague Harbor of Refuge VA
VA	Chincoteague Inlet VA
VA	Cranes Creek VA
VA	Deep Creek Newport News VA
VA	Greenvale Creek , Lane Co VA
VA	Hampton Creek VA
VA	Horn Harbor VA
VA	Hoskins Creek VA
VA	Lafayette River VA
VA	Little Machipongo River VA
VA	Little Wicomico River VA
VA	Lower Machedoc Creek VA
VA	Lynnhaven Inlet VA
VA	Meherrin River VA
VA	Monroe Bay Creek VA
VA	Nansemond River VA
VA	Neabsco Creek VA
VA	Newport News Creek VA
VA	Nomini Bay Creek VA
VA	Nottoway River VA
VA	Occoquan Creek VA
VA	Oyster Creek VA
VA	Parker Creek VA
VA	Potomac River Mt Veron VA
VA	Queens Creek VA
VA	Quinby Creek VA
VA	Rappahannock River VA
VA	Rudee Inlet VA
VA	Starlings Creek VA
VA	Tangier Channel VA
VA	Tylers Beach Channel VA
VA	Upper Machodoc Creek VA
VA	Waterway Coast Of VA
VA	Whitings Creek, Middlesex County
VA	Winter Harbor VA
WA	Anacortes WA
WA	Bay Center BB WA
WA	Blaine River WA
WA	Cowlitz River WA
WA	Deep River WA
WA	Edmonds Harbor WA
WA	Elochman Slough WA
WA	Friday Harbor WA
WA	Grays River WA
WA	Hammersley Inlet WA
WA	Kingston Harbor WA
WA	Lake River WA
WA	Lewis River WA
WA	Mats Mats Bay WA
WA	Nachotta BB WA
WA	Neah BAY
WA	Olympia East Bay Marina WA
WA	Port Townsend Harbor WA
WA	Quillayute River WA
WA	Skamokawa Creek WA
WA	Swinomish Channel WA
WI	Algoma Harbor WI
WI	Bayfield Harbor WI
WI	Big Suamico Harbor WI
WI	Cornucopia Harbor WI
WI	Fox River WI
WI	La Pointe Harbor WI
WI	Pensaukee Harbor WI
WI	Saxon Harbor WI

ADDITIONAL QUESTIONS FOR THE RECORD FROM CONGRESSMAN BUNN

JETTY REPAIRS AT SMALL HARBORS

Question. Dr. Zirschky, jetties constructed and maintained by the Corps currently exist at most of the coastal ports where you propose to terminate O&M dredging. What will the Corps policy be if jetty repair is required at these smaller ports? Will jetty repair also be called a local responsibility?

Answer. The proposed policy change would apply to any operation and maintenance required at the harbors. Jetty repairs would be included as a local responsibility.

QUESTIONS SUBMITTED BY CONGRESSMAN JIM BUNN

TARGET FOR SAVINGS

Question. Dr. Zirschky, smaller port O&M dredging is only one of the policy changes you propose to cut over $900 million from your budget. Changes in flood control, continuing authority projects, and beach replenishment are among other changes you recommend. Did you set this target of over $900 million yourself, or was it given to the Corps by OMB as their target for the Corps to reach?

Answer. As a normal part of the budgetary process within the Executive Branch the Office of Management and Budget furnishes each agency and department with targets for their programs in order for the total program of the President to comply with the overall targets established by budget agreement with Congress the prior year.

QUESTIONS SUBMITTED BY CONGRESSMAN JERRY LEWIS

Question. The Corps of Engineers has proven over the years its ability to respond to this nation's infrastructure needs and supported our continuous economic growth. In your FY96 budget, you propose to phase out what are referred to as localized projects for beach erosion and local flood protection, and to transfer responsibility for these problems to state and local governments because these projects are not considered "nationally significant". Yet over the history of the Corps' civil works program, and particularly in response to the landmark 1936 Flood Control Act, the Corps has been required to measure these projects in relation to their economic effectiveness. Furthermore, the Water Resources Council's Economic and Environmental Principles and Standards, adopted by the Administration in 1983, established a rigor to the economic analysis, assuring that economic decisions of the Corps are based on National Economic Development criteria and not regional gains and transfers, to ensure all projects have national merit.

As we look today in serving our nation's economic needs to further our national strength, particularly in view of the lack of local communities ability to find these infrastructure improvements, elimination of these important programs is counterproductive. As recently as 1986 the Congress enacted legislation to more fully involve states and local communities financially in the planning and implementation of these projects. Loss of these projects will mean this nation will fall into the vicious cycle of economic losses from material disaster followed by disaster relief, more characteristic of countries of lesser economic stature. It is particularly upsetting to see a proposal to shrink these programs as the regulatory programs continues to grow.

Please comment.

Answer. In the formulation of the FY 96 budget request for the Civil Works program of the Army Corps of Engineers we were faced with hard choices to meet the FY 96 and outyear ceilings required by the need to reduce the Federal deficit. Basically there are two choices available to reduce the Civil Works program to meet the established ceilings, either reduce all parts of the program or find portions of the program that can be returned to other levels of government or the private sector. We determined that it is more appropriate to select portions of the program to discontinue so that the remainder can be funded at a level where they are productive and efficient. In this instance we have proposed that local projects where a lower level of government has the institutional ability to provide the service is an appropriate place to cut the program. In making this proposal we are not proposing to overturn the many strides in economic analysis that have been made. Furthermore, in no way do we wish to imply that local protection projects should not continue to be built. Such projects, as you note, have done much to enhance this nation's economic growth.

PROPOSAL TO LIMIT CORPS INVOLVEMENT TO INTERSTATE STREAMS

Question. I understand that the Administration is considering a limitation of Corps of Engineers participation in flood control projects to only interstate streams. Average state size west of the Mississippi, including Hawaii, is about 155,000 square miles. This compares with 33,000 square miles for the New England states. Please comment on how this might impact relative distribution of interstate rivers among the regions and consequently relative distribution of projects qualifying for Corps involvement.

Answer. The FY 96 budget submitted to the Congress is formulated on the basis of a new policy for Corps of Engineers involvement in flood control projects. The policy establishes three criteria for Corps involvement; 1) the majority of the waters causing damage must come from outside the state, 2) the benefit to cost ratio of the project must be at least 2 to 1, and 3) the local sponsor must be willing and able to provide 75% of the projects costs. This policy will limit Corps involvement to projects on the larger rivers of this country that traverse state boundaries. State size is probably not as big a factor in the distribution of new projects as is the length of the river and its course with respect to state boundaries. We believe then, that the relatively few projects that will qualify for Corps involvement will be widely distributed, although those states whose rivers are isolated from other states would not qualify for Corps involvement in flood control projects.

QUESTIONS FOR THE RECORD FROM MR. LEWIS

NORCO BLUFFS, CA

Question. What amount of funds are necessary to continue the Norco Bluffs, California, feasibility study on a fully funded basis in FY 96?

Answer. Funds of $300,000 are needed to continue the Norco Bluffs feasibility study.

Question. Would these funds complete the Norco Bluffs Study?

Answer. No; additional funds of $75,000 would be needed to complete the study.

Question. Why wasn't the ongoing Norco Bluffs, California, study recommended for the FY96 budget?

Answer. The project purpose is considered to be erosion protection, and is therefore not in accordance with Administration policy.

SAN ANTONIO CREEK, CA

Question. FY95 funds were provided for a reconnaissance study of flooding problems along San Antonio Creek, California. What amount of funds are required to complete reconnaissance studies and initiate feasibility studies at a fully funded level in FY96?

Answer. The amount of $150,000 is included in the FY 1996 budget to complete the reconnaissance study. The project does not meet the criteria of "national significance", so continuing into feasibility is not included in the budget. If the Corps were to continue into the feasibility study, another $200,000 would be required in FY 96.

QUESTIONS FOR THE RECORD FROM MR. LEWIS

CONTINUING AUTHORITIES PROGRAM
MISSION ZANJA CREEK, CA

Question. Mission Zanja Creek, California- The Secretary of the Army, acting through the Chief of Engineers, is directed to conduct a feasibility study and initiate design of an inlet expansion plan for flood control, Mission Zanja Creek, California, under Section 205 of the Flood Control Act of 1948. Funds of $300,000 are provided for this purpose.

Your reconnaissance studies of Mission Zanja, California indicated that the most efficient program to expedite this study would entail a feasibility study under your Section 205 Small Flood Control Project, Continuing Authorities Program. What amount of funds would be required to expedite this study in FY96?

Answer. The feasibility study for the Mission Zanja Creek project is scheduled to begin in fiscal year 1995. Funds available for fiscal year 1995 and the fiscal year 1996 request are sufficient to fund anticipated needs for this project.

QUESTIONS SUBMITTED BY CONGRESSMAN BRIAN BILBRAY

Question. Although I understand the budgetary constraints the Army Corps of Engineers is currently facing, what is the Administrations' plan to complete projects begun by the Corps?

Answer. The policy for local projects announced with the budget request will be applied to new projects or separable elements that have not yet been funded. All studies or projects that are underway in FY 95 will be funded to complete the current phase of work. This means that reconnaissance studies underway in FY 95 and scheduled for completion in FY 96, will be completed and the feasibility study undertaken only if the reconnaissance study finds a potential project of national significance. Feasibility studies underway will be completed and preconstruction engineering and design (PED) will be undertaken only if the feasibility report recommends for authorization a project that is nationally significant. Ongoing PED will be completed and only nationally significant projects will be budgeted for construction. Finally, ongoing construction projects will be completed.

QUESTIONS FOR THE RECORD FROM MR. BILBRAY

SAN DIEGO RIVER AND MISSION BAY, CA

Question. Because there was "design deficiency" in the original design of the San Diego Flood Channel and the entrance to Mission Bay built by the Corps, does the Corps consider itself to be responsible for rectifying the current deterioration of the Breakwater timber pile?

Answer. At the present time we are evaluating whether or not this is a design deficiency and have not reached a conclusion. If it is determined to be a design deficiency, we could propose to replace the breakwater.

Question. Due to the emergency situation of the Breakwater project, is it possible for FY 1995 money to be reprogrammed?

Answer. If a design deficiency was determined, the initiation of construction would have to be considered as any other investment decision, evaluated by both the Administration and Congress. Normally, decisions of this nature are not accomplished through the reprogramming process.

Question. Does the Army Corps of Engineers consider itself liable for future property damages and possible loss of life due to the inevitable collapse of the Breakwater timber pile?

Answer. No, because the timberpile breakwater was constructed as a temporary structure. Also, whether we budget and program to change the nature of the project from an originally authorized temporary structure to a permanent solution, is a discretionary function of the Government and not subject to the Federal Tort Claims Act.

Mr. MYERS. Don, are you old enough to retire?

Mr. CLUFF. Yes, sir.

Mr. MYERS. Well, you have been around for quite a while, I realize that, but so have Mr. Bevill and I, and we are not planning on that. I hope what you have is not contagious here. Well, we thank you for your contribution through the years and your cooperation. You have always been very willing to provide for us the information we need to collectively, together, make the decisions we have to make, so we wish you well. I suspect we will be hearing from you. You may retire from this job, but just change hats. I imagine you will be coming back, won't you?

Mr. CLUFF. I hope not, sir. It has been a pleasure.

Mr. MYERS. After today you think you have had enough?

Mr. CLUFF. It has been a pleasure working with you.

Mr. MYERS. The committee has been a bit rough, but it isn't your fault. You are the carrier of bad news as far as we are concerned here, so we may be a little rough, we apologize to that. Mr. Secretary, General Williams, General Genega, Don, we wish you well. Thank you very much for your testimony. The committee stands adjourned until 2:00 this afternoon.

TUESDAY, FEBRUARY 21, 1995.

OHIO RIVER DIVISION

WITNESSES

MAJ. GEN. ALBERT J. GENETTI, JR., DIVISION ENGINEER
JOHN P. D'ANIELLO, DIRECTOR OF PROGRAMS MANAGEMENT
DANIEL E. STEINER, ACTING DIRECTOR OF PLANNING AND ENGINEERING
MIKE B. WHITE, CHIEF OF CIVIL WORKS PROGRAMS MANAGEMENT DIVISION
WILLIAM K. EICHER, ACTING DIRECTOR OF CONSTRUCTION-OPERATIONS

Mr. MYERS. The committee will come to order. We are pleased to have the Ohio River before us today, the important river to some of us. I guess I am the only one here that is really that involved with your division. Pleased to have you, General Genetti. Proceed as you care.

General GENETTI. Mr. Chairman, I am pleased to be here today to report on the status of work in the Ohio River Division. Accompanying me are four members of the division staff. On my left is Mr. Mike White of Programs and Mr. Bill Eicher, the Director of Operations. To my right is Mr. John D'Aniello, the Director of Program Management and Mr. Dan Steiner, the Director of Engineering.

Mr. MYERS. We are pleased to have you.

General GENETTI. Mr. Chairman, with your permission, I will submit my status report for the record and give you a brief summary.

Mr. MYERS. Your entire prepared statement will be in the record. Proceed as you wish.

General GENETTI. The Ohio River Division is responsible for water resources development within the Ohio River Basin. This area includes portions of 14 States, 63 Congressional Districts, and a population of about 25 million.

Our fiscal year 1996 budget request is for $342 million. This will be combined with $120 million of projected carryover from fiscal year 1995 for a total program of $462 million.

Before I discuss the specifics of the budget request, I would like to address a few key initiatives.

In partnership with the navigation industry, we have developed a strategy to reduce construction costs of four projects by approximately 20 percent. By bringing Corps designers and waterway users together to evaluate new designs and construction techniques, we hope to, in fact, reduce construction costs. I am pleased to report cost reductions to date of already $100 million. We project an additional $300 million in cost reductions in the future.

This partnership extends beyond reducing construction costs. We have formed several working groups to identify and implement improvements to the Inland Waterway Navigation System.

We are developing a new lock operating regulation. We are improving communications. We are combining annual meetings. We are expanding our maintenance schedule to include the Mississippi as well as the Ohio River, and we are changing operational procedures at several of our locks to increase their capacity.

I will now address specifics of our fiscal year 1996 budget request. The general investigation request of $13.6 million, along with fiscal year 1995 projected carryover of $2 million will provide total funding of $15.7 million for 18 study efforts. Permit me to highlight a few.

At Youghiogheny Lake in Pennsylvania, local water companies would like to explore reallocating part of the lake storage for water supply. $250,000 will be used to initiate a reconnaissance study, which will be completed in January of 1997.

In Indianapolis north, our feasibility study is investigating reconstructing and extension of non-Federal levees. $55,000 will be used to complete the feasibility phase in April of 1996.

Metro Center is located along the Cumberland River in Nashville, Tennessee. The existing 3-mile levee is seriously deteriorated. $400,000 will be used to complete the recon phase and continue into the feasibility study.

Marmet Locks and Dam in West Virginia are undersized and severely restrict barge traffic. The project consists of a new, larger lock and is not yet authorized for construction. The $5.3 million will complete preconstruction engineering and design.

Our fiscal year 1996 construction general budget request of $88 million, together with projected fiscal year 1995 carryover of $117 million provides $205 million for 12 projects. The carryover is due to overly optimistic programming, unusually adverse weather, contract award delays, and resolution of complex environmental issues.

At Byrd Locks and Dam our new locks became operational in January 1993. In two years alone, Byrd Locks have realized transportation savings of nearly 23 percent of their construction cost. At this rate, costs will be recovered by the year 2002. $10 million will continue rehab of the dam.

At Johnstown, Pennsylvania, a new construction start will rehab the existing local flood protection project. $1.2 million will be used to begin real estate activities and continue project design. Project rehab is estimated at $35.5 million.

Olmstead Locks and Dam will replace locks and dams 52 and 53 on the lower Ohio River. The locks' cofferdam will be completed this fall. $32 million will be used to begin lock construction and to continue project design.

We are adding an additional lock at Winfield Locks and Dam. In August 1990, toxic wastes were discovered in the new approach channel. We have notified the former owner of our intent to recover environmental clean-up costs. Through the diligent efforts of Huntington District and the Department of Justice, we hope to negotiate a solution that could save about $100 million.

The new lock is still scheduled for operation in the spring of 1997. $12 million will continue lock construction.

Levee construction on the West Columbus project began in September 1993. $2.8 million will be used to continue construction and design.

Our fiscal year 1996 budget request for operation and maintenance general is $241 million. This includes $137 million for operations and $104 million for required project maintenance.

The O&M budget supports our 128 waterway and flood control projects. These projects are an integral part of our country's infrastructure. Their reliable operations are critical to the national economy. As these structures age, maintenance becomes more important. $119 million is for navigation channels and locks and dams. Major components at many of our navigation projects will receive essential repairs to such items as gates and valves.

$122 million is for flood control reservoirs, channel improvement, and hydro projects. Last year our hydro plants returned more than $32 million to the U.S. Treasury.

Taxpayers have invested $3.2 billion in our basin's flood control system. Projects have prevented $11.9 billion in cumulative flood damages, a return of $3.72 for every dollar invested. Last year, these projects prevented more than $767 million in losses.

We are working to conserve and restore the one million acres of land and water entrusted to our care. To mitigate the effects of construction at Olmstead, we are protecting and restoring wetlands to provide increased waterfowl habitats.

We have restored more than 200 acres of prairie, wetlands, and forest for wildlife habitat working with the State of Ohio, the Soil Conservation Service, and volunteer private citizens.

May I have the lights on, please.

Previously, I addressed our partnering efforts with the navigation industry. As an example, all these papers that Bill is holding up right now were Corps regulations that applied to towboats passing through the locks on the Ohio and Mississippi Rivers. By working with several major navigation companies, we have succeeded in reducing the regulations from three Corps divisions and seven Corps districts to roughly this 10-page document you see here. Mr. Chairman, this concludes my status report.

[CLERK'S NOTE.—The prepared statement of General Genetti and the justification sheets for the Ohio River Division follow:]

Status Report on Civil Works Activities in the Ohio River Division
Fiscal Year 1996
Major General Albert J. Genetti, Jr., Division Engineer

AREA OF RESPONSIBILITY

The Ohio River Division is responsible for water resources development within the Ohio River Basin, an area of 204,000 square-miles, including portions of 14 states, 63 Congressional districts, and a population of 25 million. The Ohio River Basin is a key agricultural, industrial and manufacturing area in the heartland of the nation.

Centrally located at Cincinnati, Ohio, the division has district offices in Pittsburgh, Pennsylvania; Huntington, West Virginia; Louisville, Kentucky; and Nashville, Tennessee.

This status report covers the three major programs comprising the budget: General Investigations; Construction, General; and Operation and Maintenance, General.

BUDGET COMPARISON FISCAL YEARS 1995-1996

Our Fiscal Year 1996 budget request, coupled with programmed carryover, is a decrease of $26.6 million as compared to Fiscal Year 1995. This decrease is a result of a realistic assessment of our past execution performance coupled with the large amount of carryover that offsets the need for additional funding during Fiscal Year 1996 to meet our project schedules.

	Fiscal Year 1995 Budget Request (Programmed Carryover)	Fiscal Year 1996 Budget Request (Programmed Carryover)
	$ 385,953,000	$ 342,090,000
	(102,200,000)	(119,487,000)
TOTAL	$ 488,153,000	$ 461,577,000

FISCAL YEAR 1996 BUDGET

The Fiscal Year 1996 budget request is detailed in the table below. Each Appropriation category will be addressed in turn.

Summary of Fiscal Year 1996 Budget Request

APPROPRIATIO N CATEGORY	FY 96 TOTAL PROGRAM $000	FY 95 UNOBLIGATED PROGRAMMED CARRYOVER $000	FY 96 BUDGET REQUEST $000
GI	$ 15,664	$ 2,017	$ 13,647
CG/IWTF*	205,231	117,470	87,761
O&M	240,682	0	240,682
TOTAL	461,577	119,487	342,090

* Includes $38.874 million from the Inland Waterways Trust Fund (IWTF).

We project a carryover in the General Investigations appropriation category of $2.017 million and of $117.47 million in the Construction General appropriation category. These large carryover amounts are due to overly optimistic programming , unforeseen weather and contract award delays and resolution of complex environmental issues.

I have reduced my overall request for Fiscal Year 1996, recognizing our projected Fiscal Year 1995 carryover and considering the Ohio River Division's historical expenditure pattern as shown in the following table. The Fiscal Year 1996 budget request represents a realistic assessment of our funding requirements, as compared with previous years.

Three Year Historical Execution Performance

APPROPRIATIO N CATEGORY	FY 92 $000	FY 93 $000	FY 94 $000	THREE YEAR AVERAGE $000
GI	$ 15, 603	$ 15, 684	$ 20, 341	$ 17,209
CG/IWTF*	198,774	125,404	170,715	164,964
O&M	189,870	195,257	228,361	204,496
TOTAL	404,247	336,345	419,417	386,669

* Includes $38.874 million from the Inland Waterways Trust Fund (IWTF).

Our average General Investigations expenditures over the past three fiscal years was over $17 million. In Fiscal Year 1994 we executed over $20 million, our highest execution total over the past five years. My Fiscal Year 1996 General Investigations budget request is for $13.647 million. This will be combined with an anticipated unobligated program carryover of $2.017 million from Fiscal Year 1995 into Fiscal Year 1996 for a total program of $15.664 million.

Our average Construction General, including the Inland Waterways Trust Fund, expenditures over the past three fiscal years has been about $164.964 million. In Fiscal Year 1994 we executed $170.715 million. My Fiscal Year 1996 budget request is for $87.761 million. This will be combined with an anticipated unobligated program carryover of $117.470 million from Fiscal Year 1995 into Fiscal Year 1996 for a total program of $205.231 million. Should we expend funds faster than predicted, we will work with HQUSACE to reprogram unobligated funds to cover any additional needs.

GENERAL INVESTIGATIONS

The General Investigations Program includes Reconnaissance Studies, Feasibility Studies and Preconstruction Engineering and Design activities consistent with our current emphasis on both flood damage prevention, and commercial navigation and environmental restoration efforts The General Investigations request provides funds for 18 study areas. This status report will highlight several of the more significant Ohio River Division studies and projects in the General Investigations program.

	Start	Continue	Complete	
Surveys	1	9	3	$ 5,671,000
Preconstruction Engineering & Design	0	1	4	7,976,000
TOTAL	1	10	7	$13,647,000

FY 1996 Survey New Start

Funds are requested in the Fiscal Year 1996 budget to initiate one special study.

Youghiogheny Lake Storage Reallocation, Pennsylvania

The Municipal Authorities of Westmoreland County and North Fayette County in Pennsylvania presently obtain a large portion of their untreated water from the Youghiogheny River. The operation of these systems is regulated by the Pennsylvania Department of Environmental Resources, which establishes a maximum daily withdrawal limit based upon minimum acceptable river flows to ensure that the water quality and low flow augmentation purposes of Youghiogheny Lake are not compromised As a result of increasing water demand and recent regional drought conditions, the Department of Environmental Resources has directed these water companies to secure additional storage to provide the needed supplemental releases during periods of low flow and high demand The water companies have requested the Corps of Engineers to explore the potential for reallocating a portion of the

Youghiogheny Lake storage for water supply. The Commonwealth of Pennsylvania and the municipal water authorities have indicated an interest in cost sharing the feasibility study, and have also indicated a willingness to purchase any additional storage that could be reallocated to water supply. Fiscal Year 1996 funds of $250,000 will be used to initiate a reconnaissance study, which will be completed in January 1997.

Navigation Studies

Our Fiscal Year 1996 budget contains funds to continue two navigation studies.

Uniontown/Ohio River Mainstem Study, Kentucky, Illinois and Indiana

Uniontown, Cannelton and Newburg Locks and Dams on the lower Ohio River pass 81 million tons annually or about 30 percent of the total Ohio River System tonnage. Current traffic levels already exceed the capacity of the 110- by 600-foot auxiliary locks during maintenance closures of the 110- by 1,200-foot main locks causing delays to shippers. As the projects age, maintenance closures of the main chambers will increase in frequency. As traffic continues to grow, waterway operating costs will increase significantly because of the disruptions and delays. The Feasibility Study was initiated in Fiscal Year 1992. This study is identifying the projected use of the navigation system and evaluating capital improvements, revised maintenance procedures and operational management measures to meet future traffic demands. Fiscal Year 1996 funds of $2.6 million will be used to continue the study which is scheduled for completion in August 1997.

Kanawha River, West Virginia

Navigation on the Kanawha River, a tributary of the Ohio River, is maintained by Winfield, Marmet and London Locks and Dams. These three projects, nearly 60 years old, have small dual-chambered 56- by 360-foot locks which severely restrict the use of modern, efficient towing equipment. Construction of a new 110- by 800-foot lock at Winfield began in June 1990 and is now 20 percent complete. The Marmet study was completed in December 1993 recommending another new 110- by 800- foot lock at that location. London tonnage has increased an average of 16 percent per year since 1985, and the anticipated increased demand for low sulfur coal could result in lock congestion problems early next century. Fiscal Year 1996 funds of $703,000 will be used to complete the London interim study and continue work on the Kanawha River system final report.

Flood Damage Prevention Studies

Fiscal Year 1996 funding is requested to continue seven and complete three flood damage prevention studies.

Indianapolis, White River (North), Indiana

The White River Basin in Indiana, a drainage area including Indianapolis in Marion County, experiences chronic flooding and drainage problems. Based on current flood damage and survey data, a 100-year flood event would cause damages of $79.2 million in the primary study area. A feasibility cost sharing agreement with the city of Indianapolis was executed in March 1993. The study is investigating reconstruction and extension of non-Federal levees in the communities of Warfleigh and Rocky Ripple in northern Indianapolis. Fiscal Year 1996 funds of $55,000 will be used to complete the feasibility phase of the study in April 1996.

Ohio River Flood Protection (Indiana Shoreline), Indiana

The Ohio River shoreline study is evaluating the condition of six Federally-constructed and locally maintained flood protection projects which are 40-50 years old. The study will determine the continued serviceability, the costs, and the Federal interest in pursuing rehabilitation. Fiscal Year 1994 funds will complete the reconnaissance study in 1995 and Fiscal Year 1996 funds of $275,000 will continue into the feasibility study.

Metropolitan Cincinnati, Northern Kentucky

The three counties of Boone, Kenton and Campbell in Northern Kentucky are being studied for flood control problems. Fiscal Year 1994 funds were used to complete a limited scope reconnaissance study consisting of problem identification and analysis. Fiscal Year 1996 funds of $300,000 will be used to complete a full scope reconnaissance phase. To date, potential flooding at the community of Silver Grove along the Ohio River in Campbell County and in Boone County's Gunpowder Creek Basin are areas of focus. The Boone County area in particular has experienced dramatic urbanization and is now experiencing increased flooding. The reconnaissance phase is scheduled for completion in December 1996.

Metropolitan Louisville, Beargrass Creek, Kentucky

Beargrass Creek is a tributary of the Ohio River located in central Jefferson County, Kentucky. Limited channel capacity and increased runoff from upstream development would result in approximately $2.1 million in average annual damages to the basin. The Louisville and Jefferson County Metropolitan Sewer District signed a feasibility cost sharing agreement in July 1994. Fiscal Year 1996 funds of $270,000 will be used to continue the feasibility phase which is scheduled for completion in February 1997.

Metropolitan Louisville, Southwest, Kentucky

The study area is located in Southwest Louisville, Kentucky, in the vicinity of the University of Louisville and the Churchill Downs race course. The frequency and extent of the flooding have increased significantly in recent years, including the loss of life in August 1992. Fiscal Year 1995 Congressionally-added dollars are being used to initiate and complete a reconnaissance study in February 1996. Fiscal Year 1996 funds of $100,000 will be used to continue into a cost shared feasibility study with the Louisville and Jefferson County Metropolitan Sewer District, if warranted.

Conemaugh River Basin, Pennsylvania

The Conemaugh River Basin comprises an area of 1,372 square miles and includes parts of four counties. The reconnaissance study, completed in February 1994, recommended that seven environmental restoration project sites in three sub-basins, all of which have been severely degraded by bituminous coal mining activities, proceed into feasibility phase studies. Cambria County Conservation and Recreation Authority and the Somerset County Conservation District have indicated they would enter into a feasibility cost sharing agreement. Fiscal Year 1996 funds of $200,000 will be used to continue the feasibility study scheduled for completion in March 1997.

Metro Center Levee, Tennessee

Metro Center is a commercial development, located along the Cumberland River in Nashville, Tennessee. The complex contains about 50 structures with an estimated value of $150 million. A 3.1 mile levee protects this complex from flooding. The toe of the levee in two areas and the remainder of the project exhibits signs of overall deterioration. This deterioration and seepage problems are threatening the structural stability of the levee. Fiscal Year 1995 funds are being used to initiate a reconnaissance phase study. Fiscal Year 1996 funds of $400,000 will be used to complete the reconnaissance phase and continue into the feasibility study. The reconnaissance phase is scheduled for completion in December 1995.

Cheat River Basin, West Virginia

The Cheat River watershed, which drains 1,422 square miles, is located primarily in West Virginia with only a few miles of river in Pennsylvania. Major flooding within the basin occurred in November 1985 and caused in excess of $116 million in damages. The magnitude of the flood damages prompted the Governor of West Virginia to express interest in flood protection measures for the entire Monongahela River Basin including the Cheat River Basin. Major flooding recurred in February 1994 with an estimated $10 million in damages. The intent to cost share the feasibility study has been received from the state of West Virginia and the Commonwealth of Pennsylvania. Fiscal Year 1995 funds are being used to initiate the reconnaissance phase of the study. Fiscal Year 1996 funds of $65,000 will be used to complete this study in November 1995.

Comprehensive Studies

Fiscal Year 1996 funds are also requested to continue one and complete one comprehensive study.

Wabash River, Middle Reaches, Indiana

This study addresses flood problems in concert with restoring the fish and wildlife resources and wetlands in the Greenfield Bayou area of Vigo County, Indiana. Average annual flood damages in this area are estimated at $1.7 million. A feasibility cost sharing agreement with the Indiana Department of Natural Resources and Vigo County was completed in April 1993. Fiscal Year 1996 funds of $153,000 will be used to complete the feasibility phase of the study in September 1996.

Monongahela River Comprehensive, West Virginia

The Monongahela River, formed by the junction of the Tygart and West Fork Rivers at Fairmont, West Virginia, flows in a northerly direction to join the Allegheny River at Pittsburgh, Pennsylvania, to form the Ohio River. The study area consists of the 38-mile reach of the Monongahela River lying in the State of West Virginia. The reconnaissance investigation is focusing on the enhancement of urban waterfront areas. The State of West Virginia and the cities and counties in the study area have indicated support and expressed their willingness to cost share the feasibility phase. Fiscal Year 1996 funds of $300,000 will be used to initiate the feasibility phase of the study. The reconnaissance phase is scheduled for completion in September 1995.

Preconstruction Engineering and Design

The Fiscal Year 1996 budget recommends funds to continue one and complete four preconstruction engineering and design activities.

Navigation

Fiscal Year 1996 funds are requested to continue one and complete one navigation preconstruction engineering and design activities.

McAlpine Locks and Dam, Ohio River, Indiana and Kentucky

McAlpine Locks and Dam, located at Louisville, Kentucky, has an obsolete 110- by 600-foot auxiliary lock chamber that must be replaced to economically meet the needs of current and future navigation. The proposed modernization of the facility would replace the auxiliary lock chamber with a new 110- by 1,200-foot lock at an estimated cost of $300 million. Proposed activities for Fiscal Year 1996 funds of $1.487 million include completing real estate and lock design memoranda, completing support facilities plans and specifications, and beginning preparation of lock plans and specifications. Preconstruction engineering and design is scheduled for completion in September 1997.

Marmet Locks and Dam, West Virginia

The existing Marmet Locks and Dam project in West Virginia, is located on the Kanawha River, a tributary of the Ohio River, and has small dual-chambered 56- by 360-foot locks which severely restrict the use of modern, efficient towing equipment. The approved project, estimated to cost $326 million, consists of a new 110- by 800-foot lock on the right bank landward of the existing locks and is not yet authorized for construction. Fiscal Year 1996 funds of $5.319 million will be used to complete preconstruction engineering and design in September 1996.

Flood Control

The Fiscal Year 1996 budget request includes funds to complete three flood control preconstruction engineering and design activities.

Metropolitan Louisville, Pond Creek, Kentucky

Metropolitan Louisville, Pond Creek, is located in southern Jefferson County, Kentucky. Recurrence today of the record 1964 headwater flood would cause $106 million in damages to this highly developed area. The Louisville and Jefferson County Metropolitan Sewer District has been a strong cost sharing partner on this study. The project consists of detention basins, channel improvement, and wetlands restoration, and would cost an estimated $18 million. Fiscal Year 1996 funds of $300,000 will be used to complete preconstruction engineering and design in September 1996.

Metropolitan Cincinnati, Duck Creek, Ohio

The project is located in southeastern Hamilton County, Ohio, along Duck Creek within the corporate limits of the Village of Fairfax and the city of Cincinnati. The project includes construction of levees, floodwalls, and channel modification. The local sponsors are the City of Cincinnati and the Village of Fairfax. Fiscal Year 1996 funds of $300,000 will be used to complete preconstruction engineering and design in September 1996. The project is estimated to cost $18 million.

Chartiers Creek, Pennsylvania

This project would complete the Chartiers Creek channel modification in Houston, Pennsylvania, where major flooding in September 1990 caused over $500,000 in damages. The Canonsburg-Houston portion was authorized by Section 204 of the Flood Control Act of 1965. The Canonsburg reach was constructed in the 1970's; however, the Houston reach construction was deferred pending local sponsorship of the project. The Washington County Commissioners have indicated interest in sponsoring and cost-sharing completion of the project. Fiscal Year 1996 funds of $570,000 will be used to complete preconstruction engineering and design in September 1996.

CONSTRUCTION, GENERAL

In Fiscal Year 1996, $87.761 million for the Construction General program will be used along with $117.47 million of programmed carryover from Fiscal Year 1995 for construction at 12 projects.

	Projects	
Major Rehab	1	$ 1,230,000
Navigation	4	68,940,000 *
Flood Control	4	13,687,000
Multi Purpose	1	1,600,000
Dam Safety Assurance	2	2,304,000
TOTAL	12	$ 87,761,000

* Includes $38.874 million from the Inland Waterways Trust Fund.

Fiscal Year 1996 Major Rehabilitation New Start

Johnstown, Pennsylvania, Local Protection Project

At Johnstown, Pennsylvania, a new construction start will rehabilitate an existing Federally-maintained flood protection project which is over 50 years old. Fiscal Year 1996 funds of $1.23 million will be utilized to initiate real estate activities, relocations, cultural resources and continue project design. The estimated cost of the project rehabilitation is $35.5 million.

Navigation

Funds in the Fiscal Year 1996 request will be used to continue construction of four navigation projects.

Olmsted Locks and Dam, Ohio River, Illinois and Kentucky

Construction is underway on the Olmsted Locks and Dam which will replace the 65-year-old Locks and Dams 52 and 53 on the lower Ohio River. The $1.05 billion Olmsted project will provide twin 110- by 1,200-foot locks and a "run-of-the-river" dam that will allow traffic to pass about 58 percent of the time without locking. A contract for the locks cofferdam has been awarded and will be completed this fall. Fiscal Year 1995 programmed carryover funds of $23.462 million and Fiscal Year 1996 funds of $32.1 million will be used to initiate lock construction, continue construction of waterfowl management features, and continue project design.

Locks and Dams 2, 3, and 4, Monongahela River, Pennsylvania

Locks and Dams 2, 3 and 4 in Pennsylvania are the last of the old, undersized structures on the Monongahela River. Age, deterioration, structural instability, and undersized locks will diminish system reliability resulting in frequent and long interruptions of navigation. The authorized project includes replacement of the existing Dam 2 with a new gated dam immediately upstream; removal of Locks and Dam 3; and construction of new twin 84- by 720-foot locks at Locks and Dam 4. The total project cost is estimated at $664 million. In Fiscal Year 1995, Congress added Construction General funding to initiate construction. This past December a contract was awarded to rehabilitate the floodway bulkhead system and for the auxiliary lock chamber. Fiscal Year 1996 funds of $15 million will be used for construction contracts at several relocation sites and for fabrication of maintenance bulkheads for new Dam 2 and continuation of design.

Robert C. Byrd Locks and Dam, Ohio River, West Virginia and Ohio

At the Robert C. Byrd Locks and Dam on the Ohio River, we have replaced the existing locks with two new locks, 110- by 1,200-feet and 110- by 600-feet. In its second year of operation, tonnage locked through this site totaled 56.1 million tons, exceeding the traffic level set in 1993 by nearly five million tons. The new locks have reduced the transit time from 17 hours to one hour per tow. In its first two years, Robert C. Byrd Locks have realized transportation savings of nearly $52 million, representing 23 percent of their construction cost. At this rate of savings, the cost of the locks is likely to be recovered in the form of transportation savings within the first nine years of operation. These savings are the dividends on a Federal investment which is shared by all citizens whose lives and livelihood are affected by the commodities which transit the Inland Navigation System. The new locks became operational in January 1993. Fiscal Year 1995 carryover funds of $4.316 million and Fiscal Year 1996 funds of $10 million will continue dam rehabilitation work. Total project cost is estimated to be $384 million, of which $310 million has been allocated through Fiscal Year 1995. Our current focus is on correcting critical structural deficiencies of the dam.

Winfield Locks and Dam, Kanawha River, West Virginia

The modernization of Winfield Locks and Dam on the Kanawha River includes construction of an additional 110- by 800-foot lock chamber, located landward of the existing locks, and a 110-foot non-navigable gate bay. The total project cost is estimated to be $377 million. In August 1990, dioxin and other contaminant concentrations at the project site were found to exceed Environmental Protection Agency (EPA) standards. Extensive coordination with all concerned interests resulted in a plan that would permit construction to resume. This plan provided for Government removal, storage and remediation of about 61,000 cubic yards of soil while seeking recovery of the costs from the former property owner. The Department of Justice has notified the former owner of the Government's intent to recover the costs of the environmental cleanup. As a result, the former owner has entered into negotiations with the Department of Justice to take over the responsibility and costs for removal and disposal of the contaminated material in accordance with EPA guidelines. Successful negotiations could result in a reduction in the total project costs by approximately $100 million. Construction of the new lock began in May 1994 and is scheduled to be operational in Spring 1997. Fiscal Year 1995 programmed carryover funds of $63.87 million and Fiscal Year 1996 funds of $11.8 million will continue lock construction and, if negotiations with the former owner are unsuccessful, will complete the removal and storage of contaminated material.

Flood Control

Fiscal Year 1996 funds will be used to continue construction of two and complete programmed work at two flood control projects.

Frankfort, South Frankfort, Kentucky

The local protection project for South Frankfort, Kentucky, consists of 3,811 feet of concrete floodwall and earthen levee, interior pumping facilities and bank protection. The $11.5 million project will provide protection for 390 properties. Fiscal Year 1995 carryover funds of $645,000 and Fiscal Year 1996 funds of $2.623 million will be used to complete construction.

West Columbus, Ohio

Construction of the $111 million West Columbus, Ohio, project was initiated in September 1993. The project consists of 5.2 miles of levee floodwall system, two new pump stations, modifications of two existing pump stations and 14 gate closures.

Programmed Fiscal Year 1995 carryover of $9.772 million and Fiscal Year 1996 funds of $2.8 million will be used to continue levee and floodwall construction and continue project design.

Turtle Creek, Pennsylvania

Repair and restoration of the Turtle Creek local protection project in Pennsylvania, built in 1967 near Pittsburgh, consists of channel improvements such as clearing, removal of silt and bar deposits and concrete repairs. Programmed Fiscal Year 1995 carryover of $1.976 million and Fiscal Year 1996 funds of $1.964 million will be utilized to complete the $9.6 million project.

Levisa and Tug Forks of the Big Sandy River and the Upper Cumberland River, West Virginia, Virginia and Kentucky
(Section 202)

Grundy, Virginia
(Element of Section 202)

The Grundy, Virginia, flood control project consists of a floodwall and nonstructural measures, in conjunction with separate projects for upgrade of U.S. Route 460 and development of a commercial redevelopment site. Fiscal Year 1996 funds of $400,000 plus unobligated carryover funds from Fiscal Year 1995 of approximately $2.18 million will be used to continue engineering and design efforts and begin floodproofing and floodplain evacuation. Total estimated cost of the flood control project is $79.6 million. The Grundy project is an example of a coordinated approach to infrastructure development between the U.S. Army Corps of Engineers, the Virginia Department of Transportation, the Town of Grundy, and the U.S. Department of Housing and Urban Development.

Matewan, West Virginia
(Element of Section 202)

The Matewan, West Virginia, flood control project, located in the southwestern part of the state along the Tug Fork River was initiated in 1992. Fiscal Year 1996 funds of $1.4 million plus unobligated carryover funds from Fiscal Year 1995 of $8.696 million will be used to continue construction of the floodwall/levee, pump station and complete site development and initiate relocations to the Mate Creek Housing and Community Development Site. Project completion is scheduled for April 1997 at a cost of $67.9 million.

Detailed Project Reports
(Element of Section 202)

The Fiscal Year 1996 budget request includes $4.2 million to initiate or continue detailed project reports on McDowell County, West Virginia; Martin County, Kentucky; Wayne County, West Virginia; Harlan County, Kentucky; and the city of Cumberland, Kentucky. The Fiscal Year 1996 request also includes $270,000 to complete the general plan of study for Levisa Fork Basin in Kentucky and Virginia.

Multi Purpose Projects

Barkley Dam, Kentucky

The Cross Creek National Wildlife Refuge in Kentucky was established in 1962 as mitigation for the loss of Kentucky Woodlands National Wildlife Refuge, which was partially inundated by Lake Barkley. Cross Creek stretches for 12.5 miles along either side of Lake Barkley about 60 miles upstream of the dam. Shoreline erosion threatens a system of dikes and water control structures in the refuge water system. Fiscal Year 1996 funds of $1.6 million will be used for design and initiating construction to stabilize the streambank. Remaining project cost is estimated at $9.2 million.

Dam Safety Assurance

Funds in the Fiscal Year 1996 request will be used to complete one project and continue engineering and design on a second project.

Dewey Lake, Kentucky

This Dam Safety Assurance project at Dewey Lake includes raising the height of the dam and modifying the existing spillway to maintain design capacity. Fiscal Year 1996 funds of $1.4 million will be used to continue engineering and design. The total project cost is estimated as $19.6 million.

Center Hill Dam, Tennessee

The Fiscal Year 1996 budget request of $904,000, combined with a Fiscal Year 1995 carryover of $1.95 million, will complete the $13.8 million dam safety assurance project at Center Hill Dam in Tennessee. The project modifications consist of increasing spillway capacity, and reinforcing portions of the main dam.

OPERATION AND MAINTENANCE, GENERAL

The Fiscal Year 1996 budget request for the Operation and Maintenance, General program is $240.682 million. This includes $136.904 million for operations activities and $103.778 million for required maintenance of projects. Most of the Operations and Maintenance program supports the large number of projects associated with the inland waterways and the flood protection reservoirs. These projects are an integral part of the country's infrastructure and their reliable operations are critical to the economy of the country.

Category	Extent
Locks	60
Waterways Miles	2,582
Lakes and Reservoirs	78
Channel Improvement Projects	6
Hydropower	9

Continued emphasis is being placed on maintenance due to the aging infrastructure of our operating projects. Fiscal Year 1996 funding will meet needs for required major maintenance. Funding for operations activities remains relatively constant in relation to Fiscal Year 1995 funding levels.

The program request includes $119.123 million for navigation channels, and locks and dams. Major structural and mechanical components at many of our navigation locks and dams will receive much needed repairs to such items as lock gates at Dashields, Greenup and Racine, and culvert valves at Belleville and Willow Island, all on the Ohio River. Work will also include installation of new gate machinery for the existing locks at Winfield and repair of the dam roller gate seals at Marmet, both on the Kanawha River.

The Fiscal Year 1996 request includes $75.673 million for flood control reservoir and channel improvement projects. Fiscal Year 1996 funds of $45.886 million are provided to meet the requirements of the nine multiple purpose hydropower projects in the Cumberland River Basin.

Flood Damage Prevention

The American people have invested $3.2 billion in the Ohio River Basin's 78 flood control reservoirs and 89 local flood protection projects. These projects have prevented $11.9 billion in cumulative basin-wide flood damages, a return of $3.72 for every $1.00 invested. During Fiscal Year 1994 the reservoirs and local flood protection projects within the Ohio River Division prevented losses of over $767 million.

Hydropower

The renewable nature of water resources makes hydropower an ideal supplemental energy resource. Foresight in planning has enabled the Corps to add generating units to dams completed many years ago. There are nine Corps of Engineers plants on the Cumberland River system with a capacity of over 900 megawatts. In 1994, they generated 4.1 billion kilowatt hours of electricity and returned to the U.S. Treasury over $32 million in revenue from the sale of this power. This is in addition to the flood control and recreation benefits of these projects.

Recreation

Our projects also provide recreational opportunities for the public. We annually have over 108 million recreation days logged at our 128 lakes and navigation pools. A Waterways Experiment Station study indicates that the economic impact is $2.70 per visitor hour in the Ohio Valley. That equates to $1.3 billion of economic impacts to the area each year.

INITIATIVES

Cost Reduction Initiatives for the Navigation System

We take pride in the trust this Committee has placed in the Ohio River Division for modernizing navigation. We regard our role as contributing a vital service, fostering economic development and strengthening American competitiveness in a rapidly changing world economy.

In close partnership with the navigation industry, we have developed a strategy to reduce the first construction costs by about 20 percent at McAlpine and Olmsted Locks and Dam on the Ohio River, Marmet on the Kanawha River and Locks and Dams 2, 3 and 4 on the Monongahela River. The key to our success is bringing designers and waterway users together to evaluate new design, construction and operation concepts that permit project cost reductions while maintaining high levels of service and reliability. This partnership is producing exciting results. I'm pleased to report that we already have made design changes and contingency adjustments that should save about $100 million as shown here.

CONSTANT DOLLAR SAVINGS FROM COST REDUCTION INITIATIVE

Project	Original Cost ($ Million)	Reduced Cost ($ Million)	Cost Reduction ($ Million)
McAlpine	$ 270.2	$ 254.0	$ 16.2
Marmet	243.1	239.9	3.2
Olmsted	920.8	887.1	33.7
L&Ds 2-4, Mon River	556.4	511.7	44.7
TOTAL	$1,990.4	$1,892.7	$ 97.8

I would like to share with you a number of innovative design and construction alternatives to achieve further reductions. One of the most promising construction techniques we are adopting will allow us to reduce substantially the cost of constructing the new Olmsted Dam. We will precast sections of the dam on land and then place them in the river using a crane barge. This method will eliminate the requirement for building cofferdams in the river. Cost savings will be substantial.

We are also pursuing cost reductions at new lock projects by investigating a concept that would place the filling and emptying culverts in the sills of the locks. Traditional lock walls consist of a number of monoliths each of which requires a large quantity of concrete to establish stability and provide culverts. The sill filling and emptying system eliminates the need for wall culverts, thereby allowing substantial reduction in lock wall construction costs. We are currently model testing such a filling and emptying system at the Waterways Experiment Station.

Another innovative design under investigation involves the approach walls for the lock chambers. Rather than massive guard walls, floating or post and panel walls are being considered. Concrete requirements and costs would be reduced significantly by these concepts.

Our dialogue with waterway users provides a model for empowerment and placing decisions close to those we serve. By freeing scarce funds, the Corps will be better able to serve the industry and the Nation.

Partnering

We are actively engaged in partnering with all we serve. Our partnership with the navigation industry extends beyond cost reductions associated with initial construction costs. Along with the U. S. Coast Guard and the navigation industry, we have a working relationship to study, identify and implement improvements to the inland waterway navigation system. We're developing a new single lock operating regulation, improving communications, combining annual navigation interests meetings, expanding our navigation maintenance schedule to include the Mississippi River, and looking at operational procedures to increase lock capacity.

The Ohio River Division also has a number of on-going and very successful partnering efforts in support of flood protection projects. For example, partnering is ongoing for projects located at West Columbus, Ohio, and South Frankfort, Kentucky. In these and other efforts, the Corps is participating in strong viable partnerships with states and local governments to provide infrastructure improvement in an efficient and cost effective manner fully responsive to the citizens of these communities.

The Partners for Environmental Progress program was very active last year and continues to receive support by our non-Federal partners. This program concentrates on providing our expertise and services to small and/or disadvantaged communities that do not have the capabilities or resources to fully evaluate whether privatization of a particular environmental infrastructure is desirable and feasible. Current examples of partnering include evaluating water supply infrastructure for the town of Sistersville, West Virginia, and for Northern Washington County, Pennsylvania. The investigations are cost shared fifty-fifty with seven non-federal sponsors.

CONTRACTING

The Ohio River Division achieved HQUSACE assigned Small Disadvantaged Business/8(a) goals for both Fiscal Year 1993 and Fiscal Year 1994. Overall Small Disadvantaged Business obligations increased in Fiscal Year 1994 over Fiscal Year 1993 from $43.8 million to $46.6 million. Subcontracted dollars by A/E prime contractors to minorities and woman-owned businesses increased by four percent in Fiscal Year 1994 over Fiscal Year 1993. Our command emphasis in A/E awards and subcontracts to minorities and woman-owned business has improved performance and will continue to do so.

ENVIRONMENT

As a steward of over one million acres of land and water, the Ohio River Division works to effectively conserve, restore and enhance the natural resources entrusted to its care. Through partnerships with local citizens and other government agencies, the increasingly valuable open space associated with Corps projects is being managed to provide habitat for a wide variety of species. The Louisville District has restored over 200 acres of prairie, wetlands and forest working cooperatively with Ohio Department of Natural Resources, Soil Conservation Service, and volunteer private citizens. Similar efforts are on-going in all of our districts.

Section 1135, Environmental Restoration Program, is being used to restore habitat at sites such as Caesar Creek Lake, Ohio, and Uniontown Locks and Dam on the Lower Ohio River. These scattered pockets of restored habitat are critical components of the natural ecosystem of the Ohio River Basin and will help to offset the decline of several species of raptors, waterfowl, songbirds, butterflies, amphibians, and plants.

To mitigate the effects of construction at Olmsted Locks and Dam, the Corps has developed a plan to protect native mussel beds. In cooperation with the Kentucky Department of Fish and Wildlife Resources, 2,000 acres will be added to the Ballard Wildlife Management Area. Former agricultural lands will be restored to wetlands to provide increased waterfowl habitat. The waterfowl using these areas will serve as an increased food source for nesting bald eagles.

The Muskingum Watershed Conservancy District is partnering with Huntington District to collect data for management and restoration of water quality.

Osprey nesting platforms were installed at East Branch Lake in northwestern Pennsylvania in cooperation with the Army National Guard, Pennsylvania Game Commission, and local sportsman's groups.

Each district is actively involved in environmental outreach activities, educating the public, particularly youth groups, on individual and community environmental stewardship. Project, district, and division staff work with Boy and Girl Scout groups, schools, and environmental organizations on a daily basis.

Our greatest asset in this country is our environment. By combining the efforts of the U.S. Army Corps of Engineers with that of our partners, we can assuredly protect it and offer the citizens of this country what they deserve -- great projects that are serving a specific purpose while being enjoyable to all. The better use we can make of our financial resources the better product we can offer the public. Simply stated: "Best facilities at the most projects for the least cost". It is something they deserve, and it is something we will continue to deliver.

Justification of Estimates for Civil Function Activities
Department of the Army, Corps of Engineers
Fiscal Year 1996

SUMMARY, OHIO RIVER DIVISION

	FY 1995 Allocation $	FY 1996 Request $	Increase or Decrease $
General Investigations			
Surveys	9,701,000	5,671,000 1/	-4,030,000
Preconstruction, Engineering and Design	17,634,000	7,976,000 2/	-9,658,000
Subtotal, General Investigations	27,335,000	13,647,000	-13,688,000
Construction, General			
Construction	151,289,000 3/	85,457,000 4/	-65,832,000
Dam Safety Assurance	4,966,000	2,304,000 5/	-2,662,000
Subtotal, Construction General	156,255,000	87,761,000	-68,494,000
Operation and Maintenance, General			
Project Operation	125,714,000	136,904,000	+11,190,000
Project Maintenance	100,788,000	103,778,000	+2,990,000
Subtotal, Operation and Maintenance, General	226,502,000	240,682,000	+14,180,000
GRAND TOTAL, Ohio River Division	410,092,000	342,090,000	-68,002,000

1/ Excludes $537,000 in unobligated carryover from prior years that is being programmed for use in FY 1996.

2/ Excludes $1,480,000 in unobligated carryover from prior years that is being programmed for use in FY 1996.

3/ Includes an estimated $44,302,000 to be derived from the Inland Waterways Trust Fund in FY 1995.

4/ Includes an estimated $38,874,000 to be derived from the Inland Waterways Trust Fund in FY 1996. Excludes $115,520,000 in unobligated carryover from prior years that is being programmed for use in FY 1996, of which $45,824,000 is being derived from the Inland Waterways Trust Fund.

5/ Excludes $1,950,000 in unobligated carryover from prior years that is being programmed for use in FY 1996.

Study	Total Estimated Federal Cost $	Allocations Prior to FY 1995 $	Allocation FY 1995 $	Tentative Allocation FY 1996 $	Additional to Complete After FY 1996 $
[illegible].SURVEYS - NEW:					
a. Navigation Studies: None.					
b. Flood Damage Prevention Studies: None.					
c. Shoreline Protection Studies: None.					
d. Special Studies.					
PENNSYLVANIA					
Youghiogheny Lake Storage Reallocation, PA & MD	375,000	0	0	250,000	125,000

The Municipal Authorities of Westmoreland County and North Fayette County presently obtain a large portion of their untreated water from the Youghiogheny River. The operation of these systems is currently regulated by the Pennsylvania Department of Environmental Resources (PADER), which establishes a maximum daily withdrawal limit based upon minimum acceptable river flows to ensure that the water quality and low flow augmentation purposes of Youghiogheny Lake are not compromised. As a result of increasing water demand and recent regional drought conditions, PADER has directed these water companies to secure additional storage to provide the needed supplemental releases during periods of low flow and high demand. The water companies have requested the Corps of Engineers to explore the potential for reallocating a portion of the Youghiogheny Lake storage for water supply. FY 1993 Operations and Maintenance funding has been used to develop an Initial Assessment which indicates the possibility of some amount of reallocation and operational modifications. The study will include a thorough review of the current operating schedule for the Youghiogheny project. The work will also involve profiling existing and projected water demand and recent changes in land use that may affect water quality. The current operating practices of the licensed public water supply system in the area and the constraints imposed by their water allocation permits will be examined. Storage reallocation and other alternative strategies to optimize the effective use of this water resource will be evaluated in the context of the authorized project purposes and balanced against recent changes in the river basin. Identification and modeling of the full range of expected impacts, both at the lake and downstream, will be undertaken, including the study of specific effects upon water quality, recreation, hydropower, and natural and cultural resources. Both the Commonwealth of Pennsylvania and the municipal water authorities have indicated an interest in cost sharing any feasibility studies by letters dated June 18,1992 and May 20, 1992 respectively. Both authorities have also indicated a willingness to purchase any additional storage that could be allocated to water supply. The reconnaissance report is scheduled to be completed in January 1997, which is 12 months after initiation.

Study	Total Estimated Federal Cost $	Allocations Prior to FY 1995 $	Allocation FY 1995 $	Tentative Allocation FY 1996 $	Additional to Complete After FY 1996 $
e. Comprehensive Studies: None.					
2. SURVEYS - CONTINUING:					
a. Navigation Studies.					
KENTUCKY					
Uniontown/Ohio River Mainstem Study, KY, IL, and IN	10,740,000	3,257,000	2,348,000	2,600,000	2,535,000

The study is a navigation systems analysis to adequately address the level of investments needed to provide an efficient navigation system on the Ohio River mainstem. Special emphasis will be placed on the lower Ohio portion of the system where forecasted traffic growth is greatest. The feasibility study, initiated in FY 1992, will identify projected use of the system, forecast the adequacy of the system, and identify significant adverse economic impacts which may result from any identified inadequacies. In addition, the study will identify and recommend opportunities to preserve and restore environmental attributes of the study area. The primary emphasis of the study will be on the three sites downstream of McAlpine Locks and Dam which are Uniontown, Newburgh, and Cannelton Locks and Dams. Two adjacent parallel lock chambers are located at each of the sites, the main lock chamber is 110 feet by 1,200 feet and the auxiliary lock is 110 feet by 600 feet. About 64 million tons of commodities passed through Cannelton Locks, 74 million tons through Newburgh, and 81 million tons through Uniontown in 1993. Traffic is projected to range from 93 million tons at Cannelton to 125 million tons at Uniontown by the year 2010. Existing traffic exceeds the capacity of the auxiliary locks at all Ohio River projects now, and any closure of the main locks will result in severe traffic impacts. Low intensity capital improvements, revised maintenance procedures, and operational management strategies will be included in this evaluation.

FY 1995 funds are being used to continue the feasibility stage of the study with an emphasis on preparing a reliability/condition inventory of existing locks, detailed estimates of benefits and costs for feasible lock improvement plans, and an identification of restoration opportunities. FY 1996 funds will be used for completing the locks' reliability inventory, finalizing detailed benefits and costs for feasible lock improvement plans, and developing environmental restoration plans.

The completion of the feasibility study is scheduled for August 1997.

Study	Total Estimated Federal Cost $	Allocations Prior to FY 1995 $	Allocation FY 1995 $	Tentative Allocation FY 1996 $	Additional to Complete After FY 1996 $
WEST VIRGINIA					
Kanawha River Navigation, WV	11,533,000	10,040,000	570,000	703,000	220,000

The Kanawha River, a tributary of the Ohio River, has a total drainage area of about 12,300 square miles within southern West Virginia, southwestern Virginia, and a small portion of northwestern North Carolina. A nine-foot navigation channel is maintained along the lower 91 miles by Winfield, Marmet and London Locks and Dams on the Kanawha, and Robert C. Byrd Locks and Dam on the Ohio River. The Kanawha River projects, nearly 60 years old, have small dual-chambered 360 foot by 56 foot locks which severely restrict the use of modern, efficient towing equipment. A new lock 800 foot by 110 foot is under construction at Winfield. The Marmet Interim Report which was completed in December 1993 recommended construction of a new 800 foot by 110 foot lock. London tonnage has increased an average of 16 percent per year since 1985 and the anticipated increased demand for low sulfur coal could result in lockage congestion problems early next century. Shippers on the Kanawha River strongly support lockage improvements at Marmet and London Locks and Dams.

FY 1995 funds are being used to continue the London Interim including engineering and design of alternatives, and economic and environmental system analysis. FY 1996 funds will be used to complete the London Interim and initiate work on the Kanawha River system final report.

The Kanawha River system final report is scheduled for completion in September 1997. This report will evaluate system traffic levels, channel capacities, system environmental impacts and summarize all prior interim outputs. An interim report for London Locks and Dam is scheduled for September 1996.

APPROPRIATION TITLES: General Investigations, Fiscal Year 1996

Ohio River Division

Study	Total Estimated Federal Cost $	Allocations Prior to FY 1995 $	Allocation FY 1995 $	Tentative Allocation FY 1996 $	Additional to Complete After FY 1996 $
b. Flood Damage Prevention Studies.					
INDIANA					
Indianapolis, White River, Indiana (North), IN	1,461,000	1,135,000	271,000 1/	55,000	0

The City of Indianapolis is located in Marion County in central Indiana. Marion County covers an area of 396 square miles and had a 1993 estimated population of 797,000. The White River, with a drainage area of over 1,600 square miles at Indianapolis, flows southwesterly through Marion County. Urban expansion in Hamilton County to the north and Hancock County to the east is impacting hydrologic characteristics of the urbanized watersheds in Marion County. The recent flooding of January 1991 forced evacuation of 500 to 600 homes and damaged many more. Roadways were flooded causing severe damage and loss of access; and several serious injuries were reported. Based on current flood damage survey data, a 100-year flood event would cause damages of $79,200,000 (1994 price levels) in the primary study area. The reconnaissance study investigated both structural and non-structural measures to reduce flood damages and found feasible plans to provide additional protection to properties along the left bank of the White River in the Warfleigh, Rocky Ripple, and Broad Ripple areas. The study is proceeding in accordance with the Feasibility Cost Sharing Agreement (FCSA) entered into between the Corps of Engineers and the City of Indianapolis, Department of Public Works dated 4 March 1993.

FY 1995 funds are being used to continue the feasibility study. FY 1996 funds will be used to complete the feasibility phase of the study. The feasibility cost estimate is $1,798,000 is being shared on a 50-50 basis by Federal and non-Federal interests. Up to one-half of the non-Federal share may be in-kind services. A summary of study cost sharing is as follows:

Total Estimated Study Cost	$2,360,000
Reconnaissance Phase (Federal	562,000
Feasibility Phase (Federal)	899,000
Feasibility Phase (Non-Federal)	899,000

The reconnaissance phase was completed in March 1993. The feasibility study is scheduled for completion in April 1996.

1/ $85,000 of the amount available for FY 1995 is scheduled as programmed carryover into FY 1996

Study	Total Estimated Federal Cost $	Allocations Prior to FY 1995 $	Allocation FY 1995 $	Tentative Allocation FY 1996 $	Additional to Complete After FY 1996 $
INDIANA					
Ohio River Flood Protection (Indiana Shoreline), IN	1,175,000	400,000	0	275,000	500,000

The study area includes the Indiana shoreline of the Ohio River currently protected by urban levee/floodwall projects. The purpose of the reconnaissance study is to investigate the conditions of six flood protection projects built by the Corps of Engineers from 1943 to 1954. The projects are operated and maintained by the cities of Evansville, Tell City, Cannelton, New Albany, Jeffersonville-Clarksville, and Lawrenceburg. The six projects include 33 miles of earth levee and concrete wall, and 35 pump plants, protecting an area of approximately 6,800 acres. These projects are nearing their design/economic lives of 50 years. Study efforts are focused on condition analysis and restoration, replacement, reconstruction, and rehabilitation of the structural, mechanical, and electrical features of these projects Failure of these projects would result in major urban flooding from the Ohio River. The reconnaissance study will identify remedial measures with accompanying preliminary cost estimates. The consequences of failure will be analyzed in economic terms, including an update of the flood damage prevention benefits associated with the continued functioning of these projects. The feasibility study will include a detailed evaluation of the measures determined feasible during reconnaissance level screening. High interest in the study has been expressed by the aforementioned cities. The cities of New Albany and Jeffersonville, IN, have, by May 1994 Letter of Intent, indicated a willingness to cost share the feasibility phase of study.

FY 1994 funds are being used to complete the reconnaissance study. If the reconnaissance report is certified to be in accord with policy, the funds requested for FY 1996 will be used to continue into a cost shared feasibility study. The estimated cost of the feasibility phase is $1,550,000, which is to be shared on a 50-50 percent basis by Federal and non-Federal interests. Up to one-half of the non-Federal share may be in-kind services. A summary of the study cost sharing is as follows:

Total Estimated Study Cost	$1,950,000
Reconnaissance Phase (Federal)	400,000
Feasibility Phase (Federal)	775,000
Feasibility Phase (Non-Federal)	775,000

The reconnaissance report is scheduled for completion in March 1995. A completion date is being determined for this feasibility study.

Study	Total Estimated Federal Cost $	Allocations Prior to FY 1995 $	Allocation FY 1995 $	Tentative Allocation FY 1996 $	Additional to Complete After FY 1996 $
KENTUCKY					
Metro Cincinnati, Northern Kentucky, KY	400,000	100,000	0	300,000	0

The northern Kentucky portion of the Cincinnati metropolitan area is comprised of three counties (Boone, Kenton, and Campbell) covering 563 square miles. The 1990 population of this area was 272,000. The three counties are located along the left bank of the Ohio River opposite the City of Cincinnati. A major tributary to the Ohio River, the Licking River, forms the boundary line between the two most populous counties (Kenton and Campbell) and the two largest cities (Covington and Newport) in northern Kentucky. In 1964, a major flood on the Ohio and Licking Rivers caused extensive damage. Other significant flooding on these water bodies occurred in 1978, 1984, and 1985. Flooding along the Banklick Creek, the largest Kenton County tributary to the Licking River, caused severe damage to a major public recreation area and other private property and caused one death. Based on 1981 survey data of Banklick Creek (Kenton County only), the recurrence of a 100-year frequency flood would result in $3.9 million in damage to 272 structural units. By letter dated 23 February 1993, the County Judge/Executives of the three counties have requested assistance with flooding problems in their jurisdictions and expressed willingness to cost share feasibility phase studies. Likely solutions involve detention/retention structures, traditional structural and non-structural flood protection measures.

FY 1994 funds of $100,000 are being used to complete a limited scope reconnaissance study. FY 1996 funds will be used to complete the reconnaissance phase. If the reconnaissance report is certified to be in accord with policy, funds will be requested to initiate the cost shared feasibility study.

The reconnaissance report is scheduled for completion in August 1996.

APPROPRIATION TITLES: General Investigations, Fiscal Year 1996 Ohio River Division

Study	Total Estimated Federal Cost $	Allocations Prior to FY 1995 $	Allocation FY 1995 $	Tentative Allocation FY 1996 $	Additional to Complete After FY 1996 $
KENTUCKY					
Metropolitan Louisville, Beargrass Creek, KY	1,310,000	640,000	320,000 1/	270,000	80,000

Beargrass Creek is a tributary of the Ohio River and is located in Jefferson County, Kentucky. About 26 percent of the county's population resides in the Beargrass Creek Basin. In recent years, the great majority of the 60.9 square mile drainage basin has been developed. The value of development in the study area is conservatively estimated at $500,000,000. Stream reaches of the Middle Fork of Beargrass Creek are subject to inundation as a result of insufficient in-bank flowage areas and increased runoff from upstream development. Upstream industrial, commercial, and residential development have also contributed to increased storm runoff and flooding on South Fork Beargrass Creek. Major floods occurred in the basin in 1960, 1964, 1970, and 1973. A 100-year frequency flood occurring in the basin in 1993 would damage 882 structures and would result in approximately $25 million in damages. Average annual damages for the basin based on 1993 survey data, are estimated at $2.1 million. The reconnaissance study evaluated opportunities for flood control improvements on both Middle and South Forks within the basin. The study identified four feasible alternatives, consisting of detention basins on the South Fork, which will be evaluated further in the feasibility phase. The feasibility study will evaluate other potential alternative sites, optimize the feasible plans identified in the reconnaissance study, and incorporate environmental features into the project designs. Coordination occurred throughout the reconnaissance study with the Louisville and Jefferson County Metropolitan Sewer District (MSD) and FCSA was executed on July 25, 1994.

FY 1995 and FY 1996 funds will be used to continue the feasibility phase of the study. The cost of the feasibility phase is $1,500,000 which is to be shared on a 50-50 percent basis by Federal and non-federal interests. Up to one-half of the non-Federal share may be in-kind services. A summary of study cost sharing is as follows:

Total Estimated Study Cost	$2,060,000
Reconnaissance Phase (Federal)	560,000
Feasibility Phase (Federal)	750,000
Feasibility Phase (Non-Federal)	750,000

The feasibility study is scheduled for completion in February 1997.

1/ $42,000 of the amount available for FY 1995 is scheduled as programmed carryover into FY 1996.

Study	Total Estimated Federal Cost $	Allocations Prior to FY 1995 $	Allocation FY 1995 $	Tentative Allocation FY 1996 $	Additional to Complete After FY 1996 $
KENTUCKY					
Metropolitan Louisville, Southwest, KY	1,350,000	0	500,000 1/	100,000	750,000

The Metropolitan Louisville study area encompasses a drainage area of approximately 20 square miles including the west and south ends of Louisville, Kentucky. The highly urbanized floodplain includes the campus area of the University of Louisville, the state's second largest university; as well as the Churchill Downs neighborhood, site of the historic Churchill Downs race course. The frequency of flooding has increased over the last few years in the Churchill Downs and University of Louisville areas and is a combination of stream bank flooding and combined storm sewer problems. Detailed studies will be required to fully analyze the problem and solutions. The expansion of the Kentucky Fair and Exposition Center, the reconstruction and widening of the Watterson Expressway, and airport expansion at Standiford Field appear to have contributed to the increased runoff and frequency of flooding problems in these areas. Industrial, commercial, and residential structures in the floodplain experience major widespread flooding during a five year storm event. Components of the existing local flood protection project are inadequate at high Ohio River stages Flooding occurred in the study area in 1983, 1989, and most recently in August 1992 when loss of life occurred. Media reports indicate in excess of $3,000,000 in damages resulted during the 1983 event. Initiation of the Metropolitan Louisville Southwest Interim Reconnaissance Study will evaluate opportunities for flood control and water quality improvements within the study area. The Louisville and Jefferson County Metropolitan Sewer District (MSD), which is currently cost sharing two other Louisville District flood control studies, has indicated by letter dated 29 July 1993, that flooding in Southwest Louisville is one of its priority problem areas. MSD staff understands the two phase planning process and has expressed a willingness to cost share the feasibility phase of study. Corps assistance has been requested in analyzing solutions to the flooding. Measures to be considered will include but not be limited to the use of detention/retention basins, and modifications to a Corps built pump plant.

FY 1995 funds will be used to initiate and complete the reconnaissance phase of the study. If the reconnaissance report is certified to be in accord with policy, the funds requested for Fiscal Year 1996 will be used to continue into the feasibility phase of the study. The estimated cost of the feasibility study is $1,700,000, which is cost shared on a 50-50 basis by the Federal and non-Federal interests. A summary of study cost sharing follows:

1/ $250,000 of the amount available for FY 1995 is scheduled as programmed carryover into FY 1996.

Study	Total Estimated Federal Cost $	Allocations Prior to FY 1995 $	Allocation FY 1995 $	Tentative Allocation FY 1996 $	Additional to Complete After FY 1996 $
Metropolitan Louisville, Southwest, KY (Continued)					
Total Estimated Study Cost		$2,200,000			
Reconnaissance Phase (Federal		500,000			
Feasibility Phase (Federal)		850,000			
Feasibility Phase (non-Federal)		850,000			

The reconnaissance report will be completed in February 1996, which is 12 months after initiation. A completion date is being determined for this feasibility study.

Study	Total Estimated Federal Cost $	Allocations Prior to FY 1995 $	Allocation FY 1995 $	Tentative Allocation FY 1996 $	Additional to Complete After FY 1996 $
PENNSYLVANIA					
Conemaugh River Basin, PA	978,000	403,000	210,000 1/	200,000	165,000

The Conemaugh River Basin comprises an area of 1,372 square miles within the Kiskiminetas River Basin and contains the existing Conemaugh River Lake. The Conemaugh River is formed by the juncture of the Stonycreek River and Little Conemaugh River at the "Point" in Johnstown, PA. The Conemaugh River joins Loyalhanna Creek at Saltsburg, PA to form the Kiskiminetas River. The study area includes parts of four counties; Cambria, Somerset, Indiana, and Westmoreland. The study addressed such areas as flood damage reduction, environmental restoration (with emphasis on acid mine drainage abatement), restoration of public access to the rivers, improvement of water quality, mitigation for loss of fish and wildlife habitat, and water supply. No economically feasible solution to the flood problems in the basin have been identified. A reconnaissance report, completed in February 1994, recommends that seven environmental restoration projects sites in three subbasins, all of which have been severely degraded by bituminous coal mining activities, proceed into a feasibility study. An expression of non-Federal interest in the feasibility study and the intent to enter into a Feasibility Cost Sharing Agreement has been indicated by the Cambria County Conservation and Recreation Authority (by letter dated 14 June 1994) and Somerset County Conservation Districts (by letter dated 26 May 1994).

FY 1995 funds will be utilized to supplement the existing reconnaissance report to develop a plan at one site where a sponsor has agreed to cost share in the feasibility phase. The supplement is scheduled for completion in March 1995. If the supplement to reconnaissance report is certified to be in accord with policy, the funds requested for Fiscal Year 1996 will be used to continue into the feasibility phase of the study. The preliminary estimated cost of the feasibility phase is $1,000,000, which is to be shared on a 50-50 percent basis by Federal and non-Federal interests. Up to one-half of the non-Federal share may be in kind services. A summary of cost sharing is as follows:

Total Estimated Study Cost	$1,478,000
Reconnaissance Phase (Federal)	478,000
Feasibility Phase (Federal)	500,000
Feasibility Phase (Non-Federal)	500,000

The reconnaissance phase is schedule to be completed in September 1995. The feasibility phase of the study is scheduled to be completed in March 1997.

1/ $135,000 of the amount available for FY 1995 is scheduled as programmed carryover into FY 1996.

Study	Total Estimated Federal Cost $	Allocations Prior to FY 1995 $	Allocation FY 1995 $	Tentative Allocation FY 1996 $	Additional to Complete After FY 1996 $
TENNESSEE					
Metro Center Levee, Davidson Co., TN	1,150,000	0	335,000	400,000	415,000

Metro Center is a commercial development in the Cumberland River's floodplain in Nashville, Davidson County, Tennessee. This complex was developed in the early 1980's and contains about 50 structures with an estimated value of $150 million. A 3.1 mile long municipal levee protects this complex from flooding. A joint inspection trip made in early 1993 by Corps and Metro Public Works officials revealed a high potential of failure of this project. The project has inadequate cross sections and generally fails to meet Corps design standards. The current top of the levee is slightly above the 100 year flood, but the levee is known to have seepage problems (boils and slumps in the levee) and its structural stability is questionable. All of these factors add to a lack of structural reliability. If failure occurs, there would be in excess of $120 million in damages to this highly concentrated commercial/light industrial area. Metro Nashville is a viable sponsor that is financially sound and has sponsored other Corps projects within their jurisdiction. Metro's current administration understands its cost sharing responsibilities and has expressed a strong interest in this project as stated in their letter of intent dated 31 May 1994.

FY 1995 funds will be used to initiate the reconnaissance phase of the study. FY 1996 funds will be used to complete the reconnaissance phase and, if the reconnaissance report is certified to be in accord with policy, continue into the feasibility phase. The preliminary estimated cost of the feasibility phase is $1,500,000, which is to be shared on a 50-50 percent basis by Federal and non-Federal interests. A summary of study cost sharing is as follows:

Total Estimated Study Cost	$1,900,000
Reconnaissance Phase (Federal)	400,000
Feasibility Phase (Federal)	750,000
Feasibility Phase (Non-Federal)	750,000

The reconnaissance phase is scheduled for completion in December 1995.

Study	Total Estimated Federal Cost $	Allocations Prior to FY 1995 $	Allocation FY 1995 $	Tentative Allocation FY 1996 $	Additional to Complete After FY 1996 $
WEST VIRGINIA					
Cheat River Basin, WV	400,000	0	335,000	65,000	0

The Cheat River watershed, which drains 1,422 square miles, is located primarily in West Virginia with only few miles of river in Pennsylvania below Cheat Lake/Lake Lynn. Communities and areas of development along the Cheat River from its mouth on the Monongahela River to the watershed headwaters are as follows: Pt. Marion, PA; Cheat & Lake Lynn, WV; Albright, Caddell, Camp Dawson, Kingwood vicinity, Manheim, Rowlesburg, St. George, Parsons, Hambleton and Hendricks, WV. The Cheat River Basin is the only one of four sub-basins within the Monongahela River Basin which is "uncontrolled". Major flooding within the basin occurred in November 1985 and caused in excess of $116 million in damages. The magnitude of the flood damages prompted the then Governor of the State of West Virginia to express interest in flood protection measures for the entire Monongahela River Basin including the Cheat River Basin. Major flooding recurred in February 1994 with estimated $10 million in damages. Reconnaissance level studies will be conducted to investigate structural and nonstructural measures to reduce flood damages within the Cheat River Basin. It is anticipated that these studies will recommend additional feasibility studies in accordance with Administration policy. Expressions of non-Federal interest in the reconnaissance phase and the intent to share in the cost of a feasibility study have been received from the Governor's Office of the State of West Virginia and the Department of Natural Resources of the Commonwealth of Pennsylvania by letters of 25 March 1992 and 9 April 1992, respectively. These offices have recently reaffirmed their interest verbally and are preparing updated letters to the Pittsburgh District.

FY 1995 funds will be used to initiate the reconnaissance phase of study. FY 1996 funds will be used to complete the reconnaissance phase. The reconnaissance report is scheduled for completion in November 1995.

c. Shoreline Protection Studies: None.
d. Special Studies: None.
e. Comprehensive Studies

Study	Total Estimated Federal Cost $	Allocations Prior to FY 1995 $	Allocation FY 1995 $	Tentative Allocation FY 1996 $	Additional to Complete After FY 1996 $
INDIANA					
Wabash River Basin Comprehensive IN and IL (Middle Reaches)	1,266,000	870,000	243,000 1/	153,000	0

The Wabash River-Middle Reaches study area lies in west-central Indiana along the Indiana-Illinois border and includes the Wabash River from Sullivan County to Tippecanoe County, and adjacent counties to the east. The reconnaissance study initiated in March 1990 was oriented towards evaluating the adequacy of existing agricultural levees with low levels of protection. Early in the study, landowners and local officials requested that the study focus on solving flood problems in concert with restoring the fish and wildlife resources and wetlands in the Greenfield Bayou area of Vigo County. Average annual flood damages in the Greenfield Bayou study area are estimated at $1,660,000 (1 October 1994 price level) and the May 1990 flood caused over $800,000 in damages. The reconnaissance report recommended a feasibility study for a project consisting of an agricultural levee and environmental restoration. Negotiations with IDNR and local interests for a cost shared study were initiated in late 1991 and completed in April 1993 when Vigo County signed the Feasibility Cost Sharing Agreement.

FY 1995 funds are being used to continue the feasibility phase of the study and FY 1996 funds will be used to complete the feasibility study. The estimated cost of the feasibility phase is $1,364,000, which is shared on a 50-50 basis by Federal and non-Federal interests. Up to one-half of the non-Federal share may be in-kind services. A summary of study cost sharing is as follows:

Total Estimated Study Cost	$1,948,000
Reconnaissance Phase (Federal)	584,000
Feasibility Phase (Federal)	682,000
Feasibility Phase (Non-Federal)	682,000

The reconnaissance phase (Greenfield Bayou) was completed in April 1993. The feasibility study is scheduled for completion in September 1996.

1/ $25,000 of the amount available for FY 1995 is scheduled as programmed carryover into FY 1996.

Study	Total Estimated Federal Cost $	Allocations Prior to FY 1995 $	Allocation FY 1995 $	Tentative Allocation FY 1996 $	Additional to Complete After FY 1996 $
WEST VIRGINIA					
Monongahela River Comprehensive, WV	1,200,000	600,000	0	300,000	300,000

The Monongahela River is formed by the junction of the Tygart Valley and West Fork Rivers at Fairmont, West Virginia and flows in a northerly direction for 128.7 miles to join the Allegheny River at Pittsburgh, PA and form the Ohio River. The study area consists of the 38 mile reach of the Monongahela River lying in the State of West Virginia. Navigation is currently available throughout the entire length of the river by means of nine lock and dam structures, three of which are located on the West Virginia reach. Major West Virginia towns along the river include Fairmont, Morgantown, Star City, and Westover. The reconnaissance investigation, will address flood problems in concert with enhancing the urban waterfront areas. The State of West Virginia and the cities and counties in the study area have indicated support and expressed their willingness to cost share the feasibility phase. Sponsors would be the individual communities and the West Virginia Department of Natural Resources (WVDNR).

If the reconnaissance report is certified to be in accord with policy, FY 1996 funds will be used to continue into the feasibility phase of the study. The preliminary estimated cost of the feasibility phase is $1,200,000, which is to be shared on a 50-50 percent basis by Federal and non-Federal interests. Up to one half of the non-Federal share may be in kind services. A summary of cost sharing is as follows:

Total Estimated Study Cost	$1,800,000
Reconnaissance Phase (Federal)	600,000
Feasibility Phase (Federal)	600,000
Feasibility Phase (Non-Federal)	600,000

The reconnaissance phase is scheduled for completion in September 1995.

3. PRECONSTRUCTION ENGINEERING AND DESIGN ACTIVITIES (PED) - NEW: None.

4. PRECONSTRUCTION ENGINEERING AND DESIGN ACTIVITIES (PED) - CONTINUING:

a. Navigation.

KENTUCKY

Study	Total Estimated Federal Cost $	Allocations Prior to FY 1995 $	Allocation FY 1995 $	Tentative Allocation FY 1996 $	Additional to Complete After FY 1996 $
McAlpine Locks and Dam, IN and KY	10,270,000	5,252,000	2,621,000 1/	1,487,000	910,000

McAlpine Locks and Dam are located on the Ohio River 606.8 miles below Pittsburgh, Pennsylvania, at Louisville, Kentucky. The present navigation locks are on the Kentucky side of the river, and they consist of a 110 x 1,200-foot main lock placed in operation in 1964 and two auxiliary locks which were completed in 1930 (110 x 600-foot) and 1921 (56 x 360-foot -closed since 1971). A proposed modernization of the existing facility would replace the existing auxiliary locks with a new 110-x 1,200-foot lock. Tonnages through the McAlpine locks are expected to grow annually from the 1986 figure of 53.6 million tons to 141.6 million tons in 2050. These tonnage projections indicate that McAlpine locks represent the next potential traffic bottleneck in the mainstem Ohio River system following Robert C. Byrd (formerly Gallipolis) and Olmsted. The need for a new lock is in response to identified annual increases in tonnage levels and delays. About 55 percent of present traffic is coal. The feasibility report for the McAlpine study was completed on 16 January 1990 with the issuance of the Division Commander's public notice. The report recommended construction of an additional lock (110 x 1,200-foot) at the existing site. The estimated project cost is $299,700,000 with average annual economic benefits of $40,500,000 attributable to navigation. The benefit to cost ratio is 2.5 to 1 based on an interest rate of 8 percent. The project was authorized by the Water Resource Development Act of 1990 with 50 percent sharing of construction costs by the Inland Waterways Trust Fund.

FY 1995 funds will be used to complete the Design Memorandum for the new lock chamber and continue the support facilities' plans and specifications. FY 1996 funds will be used to continue the site preparation plans and specifications and to initiate the plans and specifications for the new lock chamber. Preconstruction engineering and design is scheduled for completion in September 1997.

1/ $630,000 of the amount available for FY 1995 is scheduled as programmed carryover into FY 1996.

Study	Total Estimated Federal Cost $	Allocations Prior to FY 1995 $	Allocation FY 1995 $	Tentative Allocation FY 1996 $	Additional to Complete After FY 1996 $
WEST VIRGINIA					
Marmet Locks and Dam, WV	10,500,000	1,389,000	3,792,000 1/	5,319,000	0

The Kanawha River, a tributary of the Ohio River, has a total drainage area of about 12,300 square miles within southern West Virginia, southwestern Virginia, and a small portion of northwestern North Carolina. A nine-foot navigation channel is maintained along the lower 91 miles by Winfield, Marmet and London Locks and Dams on the Kanawha, and Robert C. Byrd Locks and Dam on the Ohio River. The Kanawha River projects, now over 50 years old, have small dual-chambered 360 foot by 56 foot locks which severely restrict the use of modern, efficient towing equipment. A new 800 foot by 110 foot lock is under construction at Winfield. Lockages and delays have significantly increased at Marmet Locks and Dam and serious congestion problems are now occurring. The National Economic Development (NED) plan recommends an additional right bank, landward lock and continued use of the existing lock chambers which will serve as auxiliary locks. The estimated project cost is $326,000,000 with average annual economic benefits of $33,400,000 attributable to navigation. The benefit to cost ratio is 2.1 to 1 based on an interest rate of 8 percent.

The project is not authorized for construction. Cost sharing of the construction funds will be 50 percent through the Inland Waterways Trust Fund. The navigation industry and the shippers on the Kanawha River support the recommended plan.

An interim feasibility report was completed 13 December 1993. FY 1995 funds will be used to continue preconstruction engineering and design phase for the new lock including Geology, Foundations, and Real Estate Design Memorandums. FY 1996 funds will be used to continue work on design memorandums and finalize the Real Estate Design Memorandum. Preconstruction engineering and design is scheduled for completion in September 1996.

1/ $598,000 of the amount available for FY 1995 is scheduled as programmed carryover into FY 1996.

Study	Total Estimated Federal Cost $	Allocations Prior to FY 1995 $	Allocation FY 1995 $	Tentative Allocation FY 1996 $	Additional to Complete After FY 1996 $
b. Flood Control.					
KENTUCKY					
Metropolitan Louisville, Pond Creek, KY	1,230,000	360,000	570,000	300,000	0

Pond Creek and tributaries drain an area of approximately 71 square miles in southern Jefferson County, Kentucky. About 5,500 structures are located within the highly urbanized Pond Creek flood plain. Due to the rapid residential and commercial development within the area, properties along Pond Creek and tributaries now have only a two-year level of protection, leaving residential, commercial, and industrial structures vulnerable to disastrous flash floods. The flood of record occurred in March 1964. A recurrence of this flood today would result in damages of approximately $106 million, under 1994 price levels, and conditions of development. The most recent flood experienced in the basin occurred in February 1990, and was estimated at approximately a five year event. Damages to residential and commercial properties in the basin totalled about $1 million. The recommended plan consists of approximately four miles of channel improvement along Pond Creek and Northern Ditch, and detention basin storage on Northern Ditch and on Fishpool Creek. Other project components include a 15 acre wetlands environmental restoration element, and construction of a hiking/bike trail along Pond Creek. Total project cost is estimated at $17,934,000, cost shared $12,207,000 Federal and $5,727,000 Non-Federal. Non-Federal annual operation and maintenance costs are estimated at $70,200. Average annual economic benefits of $3,856,000 are attributable to flood control. The benefit cost ratio is 2.4 to 1 based on an interest rate of 8 percent.

The project is not authorized for construction. The Louisville and Jefferson County Metropolitan Sewer District participated in the cost shared feasibility study of this project and intends to cost share project construction in accordance with the cost sharing and financing concepts in the Water Resources Development Act of 1986. The feasibility study was completed in March 1994.

FY 1995 funds will be used to continue preconstruction engineering and design. FY 1996 funds will be used to complete plans and specifications for 3.9 miles of channel improvement and prepare/negotiate the Project Cooperation Agreement. Preconstruction engineering and design is scheduled for completion in September 1996.

Study	Total Estimated Federal Cost $	Allocations Prior to FY 1995 $	Allocation FY 1995 $	Tentative Allocation FY 1996 $	Additional to Complete After FY 1996 $
OHIO					
Metropolitan Cincinnati, Duck Creek, OH	1,270,000	340,000	630,000 1/	300,000	0

The Cincinnati metropolitan area is comprised of eight counties in southwest Ohio, northern Kentucky, and southeast Indiana. This 2,609 square mile region includes the 19.9 square mile drainage area of Duck Creek, a tributary to the Little Miami River in southeastern Hamilton County, Ohio. Duck Creek suffers from frequent flash flooding affecting roads, utilities, 9 residential and 32 commercial/industrial properties valued at $61.2 million; threatens over 1,000 jobs in manufacturing; and disrupts production. The most recent out-of-bank flooding causing property damage was in 1994. Threatening flood conditions occurred 5 times in a four month period during 1991, with plant closures during at least one of these events. The potential for frequent damaging floods and for less frequent but catastrophic flooding exists during any given year. The recommended plan provides for a 100 year level of protection and will reduce average flood damages by 94 percent. The village of Fairfax, one of the protected communities, has already invested flood proofing measures, in 1993, to an unrelated highway bridge reconstruction which are compatible with the proposed project and has been included as part of the pre-project conditions. The estimated construction cost of the recommended project is $17,800,000, cost shared $13,350,000 Federal and $4,450,000 non-Federal. Non-Federal annual operation and maintenance costs are estimated at $45,000. The benefit-cost ratio is 1.24 to 1 based on an interest rate of 8 percent.

The project is not authorized for construction. The City of Cincinnati and Village of Fairfax participated in the cost shared feasibility study of this project and intend to cost share project construction in accordance with the cost sharing and financing concepts in the Water Resources Development Act of 1986. The feasibility study was completed 31 January 1994.

FY 1995 funds will be used to continue preconstruction engineering and design. FY 1996 funds will be used to complete the plans and specifications for 9300 feet of streambank protection and prepare/negotiate the Project Cooperation Agreement. Preconstruction engineering and design is scheduled for completion in September 1996.

1/ $58,000 of the amount available for FY 1995 is scheduled as programmed carryover into FY 1996.

Study	Total Estimated Federal Cost $	Allocations Prior to FY 1995 $	Allocation FY 1995 $	Tentative Allocation FY 1996 $	Additional to Complete After FY 1996 $
PENNSYLVANIA					
Chartiers Creek, PA	1,000,000	137,000	293,000	570,000	0

The existing Canonsburg-Houston Local Protection is located along Chartiers Creek approximately 32 miles upstream of its confluence with the Ohio River, 2.6 miles downstream of the "Point" in Pittsburgh, PA. The existing project, consisting of Units 1 and 2A in the Canonsburg area and Unit 2B in Houston, involves widening, deepening and realigning 3.9 miles of Chartiers Creek. Unit 1 was completed in 1970 and Unit 2A in 1976. Construction plans and specifications for Unit 2B are completed and approved, but this portion of the project was never constructed because the local sponsor (Washington County Commissioners) lacked the financial capability at that time. Major flooding occurred along Chartiers Creek in September 1990 with flood damages in Houston estimated in excess of $500,000. The estimated first cost of the project is $8,300,000 with estimated Federal and non-Federal costs of $6,225,000 and $2,075,000, respectively. The Washington County Commissioners have shown a renewed interest in completing the Unit 2B portion of the project. The project, as authorized, would provide 1.6 miles of channel improvement and protection against a flood having an average recurrence interval of 25 years. The Benefit/Cost ratio of the overall Canonsburg-Houston project, including the proposed Houston portion, is estimated at 1.3 to 1. FY 1994 funds were used to initiate a limited reevaluation report which includes a flood damage assessment to verify the economic feasibility of the project.

The project was authorized by Section 204 of the Flood Control Act of 1965. Consistent with the Water Resources Development Act of 1986, local interests will be required to provide all lands, easements and right-of-way estimated at $400,000; modify or relocate buildings, utilities, roads and other facilities where necessary in construction of the project, estimated at $325,000; make a cash contribution estimated at $1,350,000; and bear all costs of operation, maintenance and replacement of flood control facilities estimated at $50,000 annually. The Washington County Commissioners have expressed a willingness and have the capability to be the non-Federal cost sharing partner by letter dated 26 October 1990.

FY 1995 funds will be utilized to complete the limited reevaluation report and complete a general reevaluation study addressing the project's design and its environmental impacts. FY 1996 funds will be utilized to initiate and complete plans and specifications for the project. Preconstruction engineering and design is scheduled for completion in September 1996.

1/ $194,000 of the amount available for FY 1995 is scheduled as programmed carryover into FY 1996.

c. Shoreline Protection: None.
d. Multiple Purpose Power: None.

APPROPRIATION TITLE: Construction General - Local Protection (Flood Control)

PROJECT: Johnstown, Pennsylvania (Major Rehabilitation) (New)

LOCATION: The City of Johnstown is located in the southwestern corner of Cambria County, Pennsylvania, approximately 60 miles east of Pittsburgh. The existing project, which was constructed in six separate units, extends over approximately 3.5 miles on the Conemaugh River (Units 1, 2 and 3), 1.5 miles on the Little Conemaugh River (Unit 4) and 4.0 miles on the Stonycreek River (Units 5 and 6)

DESCRIPTION: The existing project consists of approximately nine miles of channel widening, deepening, concrete-paved channel side slopes, and concrete walls. It was constructed during the period 1938 - 1943 at a total cost of $8,865,400. Stream channel improvements include 84,500 lineal feet of concrete sideslope, supplemented by 3,000 feet of low earth dike, 9,222 linear feet of concrete floodwalls, and highway, railroad and utility relocations. Approximately 16,300 feet of privately constructed masonry and concrete walls, which existed prior to the construction of the Federal project, serve as flood walls as an integral part of the existing project. The project area includes 23 bridge crossings. The major rehabilitation project involves rehabilitation of 54 Federally- and privately-constructed wall sections and/or sideslopes, replacement of a balustrade safety wall atop a section of the existing project, and the acquisition of real estate interests for construction access to unreliable non-Federal walls. All work is programmed.

AUTHORIZATION: Flood Control Act of 1936, as amended (original project) and the Energy and Water Development Appropriations Act, 1991 (major rehabilitation project).

REMAINING BENEFIT-REMAINING COST RATIO: 6.1 to 1 at 8 percent

TOTAL BENEFIT - COST RATIO: 6.1 to 1 at 8 percent

BASIS OF BENEFIT - COST RATIO: Benefits are from Appendix 7 to the Johnstown Rehabilitation Evaluation Report, dated March, 1994, at October, 1993 price levels.

SUMMARIZED FINANCIAL DATA		STATUS (1 Jan 1995)	PERCENT COMPLETE	COMPLETION SCHEDULE
Estimated Federal Cost	$35,500,000	Entire Project	0	Being Determined
Estimated Non-Federal Cost	0			
Total Estimated Project Cost	$35,500,000			

Division: Ohio River District: Pittsburgh Johnstown, PA (Major Rehabilitation)

SUMMARIZED FINANCIAL DATA (Continued)		ACCUM. PCT. OF EST. FED. COST
Allocations to 30 September 1994	$ 0	
Conference Allowance for FY 1995	0	
Allocation for FY 1995	0	
Allocation through FY 1995	0	0
Allocation Requested for FY 1996	$ 1,230,000	3
Programmed Balance to Complete after FY 1996	34,270,000	
Unprogrammed Balance to Complete after FY 1996	0	

PHYSICAL DATA (Partial Listing)	
Channel Excavation	34,000 CY
Reinforcing Steel	320,000 LB
Rehabilitate Walls	10,900 ft.
Rehabilitate Sideslopes	1,965 ft.
Rehabilitate Balustrade	3,275 ft.

JUSTIFICATION: Johnstown has a national reputation for its flooding history. In 1889, the failure of a privately-owned upstream dam caused the death of 2,200 people. The March, 1936 flood prompted authorization of the existing project in the Flood Control Act of 1936. The existing project has been very effective, reducing flood damages by an estimated $418 million through 1993. Fifty-four walls that provide flood protection (both Federally and non-Federally owned, but all part of the project) have been found to be structurally unreliable, and major rehabilitation is needed to ensure that the existing level of protection is provided in the future to avoid further loss of life and damage to property.

FISCAL YEAR 1996: The requested amount will be applied as follows:

Initiate Real Estate Acquisition	$ 130,000
Initiate Relocations	15,000
Initiate Cultural Resources	60,000
Continue Engineering and Design	1,025,000
Total	$1,230,000

NON-FEDERAL COSTS: In accordance with the authorizing legislation, the City is responsible for providing rights of access (including temporary or permanent easements as well as environmental investigations or response actions necessary for the City to secure the rights of access) sufficient to enable the Government to repair or replace those non-Federally owned buildings and walls that were incorporated into the line of protection at the convenience of the Government when the project was initially constructed. The costs of the rights of access are negligible. In addition, the City will hold and save the United States free from damages due to construction or operation and maintenance of the work on the non-Federal structures, except for damages due to the fault or negligence of the United States or its contractors.

STATUS OF LOCAL COOPERATION: The Project Cooperation Agreement is scheduled for approval by the Assistant Secretary of the Army for Civil Works in October, 1995 and execution in November, 1995.

COMPARISON OF FEDERAL COST ESTIMATES: The current Federal cost estimate for the major rehabilitation project of $35,500,000 is the initial estimate presented to Congress.

STATUS OF ENVIRONMENTAL IMPACT STATEMENT: An environmental assessment was completed during the rehabilitation study and a signed Finding of No Significant Impacts was included in the March, 1994 Major Rehabilitation Evaluation Report.

OTHER INFORMATION: The existing Johnstown Local Flood Protection Project was authorized and constructed under the Flood Control Act of 1936, as amended, and the Corps of Engineers was given the responsibility for its operation and maintenance. The Energy and Water Development Appropriations Act, 1991 allocated funds for the major rehabilitation in the Operation and Maintenance, General appropriation and authorized and directed the Corps of Engineers to undertake a Major Rehabilitation of the existing project. The Act further directed the Corps of Engineers to investigate the non-Federally owned buildings, embankments and walls that were included in the original line of protection for the convenience of the Government, and to perform needed repair, rehabilitation or replacement at Federal expense.

APPROPRIATION TITLE: Construction, General - Locks and Dams (Navigation)

PROJECT: Olmsted Locks and Dam, Illinois and Kentucky (Continuing)

LOCATION: The project area is located in Pulaski County, Illinois and Ballard County, Kentucky on the Ohio River near Olmsted, Illinois, approximately 964 miles downstream from Pittsburgh, Pennsylvania.

DESCRIPTION: The project will replace Ohio River Locks and Dams 52 and 53. The new structure will consist of two 110-foot by 1200-foot locks adjacent to the Illinois shore and a dam comprised of a 2,200-foot wide navigable pass and a 426-foot fixed weir. All work is programmed.

AUTHORIZATION: Water Resources Development Act of 1988.

REMAINING BENEFIT-REMAINING COST RATIO: 4.9 at 8 7/8 percent.

TOTAL BENEFIT-COST RATIO: 3.7 at 8 7/8 percent.

INITIAL BENEFIT-COST RATIO: 3.7 at 8 7/8 percent (FY 1991).

BASIS OF BENEFIT-COST RATIO: Benefits are based on the benefit evaluation contained in the Olmsted Locks and Dam Benefit Update, dated October, 1990.

SUMMARIZED FINANCIAL DATA		
Estimated Federal Cost		$1,050,000,000
General Appropriations	$525,000,000	
Inland Waterway Trust Fund	525,000,000	
Estimated Non-Federal Cost		0
Total Estimated Project Cost		$1,050,000,000

STATUS (1 Jan 1995)	PERCENT COMPLETE	COMPLETION SCHEDULE
Entire Project	7.5	Being Determined

PHYSICAL DATA

Lock	- 110′ by 1200′ Chambers	2
Dam	- Navigable Pass	2,200 ft.
	Fixed Weir	426 ft.
Acres	- Dam	123
	Road	21
	Disposal Area	114
	Flow Easements	35
	Mitigation	2,000

SUMMARIZED FINANCIAL DATA (Continued)	GENERAL APPNS.	INLAND WATERWAYS TRUST FUNDS	ACCUM. PCT. OF EST. FED. COST
Allocations to 30 September 1994	$ 63,981,000	$ 63,983,000	
Conference Allowance for FY 1995	13,000,000	13,000,000	
Allocation for FY 1995	10,942,000 1/	10,942,000 1/	
Allocations through FY 1995	74,923,000	74,925,000	14
Allocation Requested for FY 1996	$ 16,050,000	$ 16,050,000	17
Programmed Balance to Complete after FY 1996	434,027,000	434,025,000	
Unprogrammed Balance to Complete after FY 1996	0	0	

1/ Reflects a total reduction of $4,116,000 assigned as savings & slippage and a total of $23,462,000 in programmed carryover into FY 1996.

JUSTIFICATION: The project area is at a strategic location on the inland waterway system. Virtually all waterway traffic moving between the Ohio River and tributaries and the Mississippi River and tributaries passes through the project area. Olmsted Locks and Dam will replace existing Ohio River Locks and Dams 52 and 53, which are over 60 years old. Both projects have a temporary lock chamber that is inefficient and neither project conforms to current design criteria for structural stability. Commercial navigation in 1992 was 95.1 million tons through Lock 52. Historically, tonnage growth has been steady and is expected to continue during the short and long term. In the 13-year period 1979-92, tonnage levels increased a total of 42 percent. The long term average annual growth rate is projected to be 1.3 percent. The value of the commodities through the project area in 1992 is estimated at $10 billion. Energy-related commodities comprised approximately 50 percent of the total tonnage, with grains and chemicals contributing approximately 15 and 10 percent, respectively, of total tonnage. Increasing demands placed by waterway traffic on the limited capacity of the existing locks will result in increasing lockage delays.

The following counties qualify as areas of "substantial and persistent" unemployment: Illinois - Alexander, Johnson, Massac, Pope, Pulaski, and Union; Kentucky - Ballard, Carlisle, Graves, Livingston, and Marshall.

Average annual benefits are as follows:

Annual Benefits	Amount
Navigation	$539,300,800
Employment	1,040,000
Cost Reduction	33,962,000
Total	$574,302,800

FISCAL YEAR 1996: The total program amount, including the requested and programmed carryover amounts of $32,100,000 and $23,462,000, respectively, will be applied as follows:

Lands and Damages	$ 1,300,000
Initiate and Complete Boat Ramp Relocation	118,000
Complete Prototype	3,010,000
Continue Lock Construction	38,054 000
Complete Waterfowl Improvements	1,550,000
Continue Engineering and Design	7,948,000
Continue Construction Management	3,582,000
Total	$55,562,000

NON-FEDERAL COSTS: In accordance with cost sharing and financing concepts reflected in the Water Resources Development Act of 1986, 50 percent of the total cost of construction will be derived from the Inland Waterways Trust Fund.

STATUS OF LOCAL COOPERATION: None required.

COMPARISON OF FEDERAL COST ESTIMATES: The current Federal cost estimate of $1,050,000,000 is a decrease of $60,000,000 from the latest estimate ($1,110,000,000) presented to Congress (FY 1995). This change includes the following items.

Item	Amount
Post-Contract Award and Other Estimating Adjustments (including contingency adjustments)	$-33,600,000
Price Escalation on Construction Features	$-26,400,000
Total	$-60,000,000

STATUS OF ENVIRONMENTAL IMPACT STATEMENT: A final Environmental Impact Statement (EIS) was filed with the Environmental Protection Agency on 4 April 1986. Due to project changes, a Draft Supplemental EIS was filed in November, 1991. The Final Supplement to the EIS was filed on 26 March 1993 and the Record of Decision was signed on 5 May 1993.

OTHER INFORMATION: Funds to initiate preconstruction engineering and design were appropriated in FY 1986. Funds to initiate construction were appropriated in FY 1991.

APPROPRIATION TITLE: Construction General - Locks and Dams (Navigation)

PROJECT: Locks and Dams 2, 3, and 4, Monongahela River, Pennsylvania (Continuing)

LOCATION: Existing Locks and Dams 2, 3, and 4 are the last of the old and undersized locks on the Monongahela River System and have components which have been in service for nearly 100 years. The three projects are located on the lower portion of the Monongahela River near the city of Pittsburgh, Pennsylvania. Measured from the Point in Pittsburgh, Locks and Dam 2 is located at river mile 11.2, Locks and Dam 3 at river mile 23.8, and Locks and Dam 4 at river mile 41.5 Six other navigation projects situated upstream of Locks and Dam 4 provide a navigable waterway to Fairmont, West Virginia. At the Point in Pittsburgh, the Monongahela joins with the Allegheny River to form the Ohio River.

DESCRIPTION: Existing Locks and Dam 2 consists of a main lock with chamber dimensions of 110′ by 720′, an auxiliary lock with chamber dimensions of 56′ by 360′, and a 748-foot fixed-crest dam. Existing Locks and Dam 3 consists of locks with chamber dimensions of 56′ by 720′ and 56′ by 360′ and a 670-foot fixed-crest dam. Existing Locks and Dam 4 consists of locks with chamber dimensions of 56′ by 720′ and 56′ by 360′ and a gated dam consisting of five 84′ gated sections and a 43′ fixed weir section. The authorized project consists of a new gated dam and a rehabilitated auxiliary chamber floodway bulkhead structure at Locks and Dam 2; new twin 84′ by 720′ locks and below-dam scour protection at Locks and Dam 4; raising pool 2 by 5 feet and lowering pool 3 by 3.2 feet; removal of Locks and Dam 3; and associated channel dredging, relocations and bank stabilization. Preconstruction Engineering and Design was initiated in January, 1992 and has consisted of hydraulic modeling for the new gated Dam 2; land- and river-based subsurface explorations at Locks and Dam 2 and Locks and Dam 4 and associated sampling, testing and analysis; and design memoranda for the Locks 2 auxiliary chamber floodway bulkhead, lock wall stabilization of Locks 2, the new gated Dam 2, relocations, project disposal and bank stabilization. Construction will begin in Fiscal Year 1995 with the upgrade of the Locks 2 auxiliary chamber floodway bulkhead and relocations. All work is programmed.

AUTHORIZATION: Water Resources Development Act of 1992.

REMAINING BENEFIT - REMAINING COST RATIO: 4.4 to 1 at 8 percent.

TOTAL BENEFIT - COST RATIO: 4.3 to 1 at 8 percent.

BASIS OF BENEFIT - COST RATIO: Benefits are from an economic update completed in May, 1994.

SUMMARIZED FINANCIAL DATA	
Estimated Federal Cost	$664,000,000
Construction General	332,000,000
Inland Waterways Trust Fund	332,000,000
Estimated Non-Federal Cost	0
Total Estimated Project Cost	$664,000,000

STATUS (1 Jan 1995)	PERCENT COMPLETE	COMPLETION SCHEDULE
Entire Project	1.6	Being Determined

PHYSICAL DATA (Partial Listing)

Locks and Dams 2: New Gated Dam
Rehabilitated Auxiliary Chamber Floodway
Bulkhead Structure
Remove Locks and Dams 3
Locks and Dams 4: New twin 84′ by 720′ locks
Scour Protection
Raising pool 2 by 5 ft.
Lowering pool 3 by 3.2 ft

	GENERAL APPNS.	INLAND WATERWAYS TRUST FUNDS	ACCUM. PCT. OF EST. FED. COST
Allocations to 30 September 1994	$ 9,068,000	$ 0	
Conference Allowance for FY 1995	3,852,000	4,148,000	
Allocation for FY 1995	3,230,000 1/	3,491,000 2/	
Allocations through FY 1995	12,298,000	3,491,000	3 7
Allocation Requested for FY 1996	$ 3,096,000	$ 11,904,000	4.6
Programmed Balance to Complete After FY 1996	316,606,000	316,605,000	
Unprogrammed Balance to Complete After FY 1996	0	0	

1/ Reflects a $622,000 reduction assigned as savings and slippage.
2/ Reflects a $657,000 reduction assigned as savings and slippage.

JUSTIFICATION: The projects are located on the Monongahela River near the City of Pittsburgh. The major problems with the projects are their deteriorated structural conditions and limited lock capacity. These problems are expected to become increasingly severe over time, particularly as the projects continue to age, and as traffic and tow size increase with the upstream construction by 1996 of larger locks at the Grays Landing and Point Marion projects. The extreme structural deterioration of Dam 2 and Locks and Dam 3 is of paramount concern because of the extreme age and poor condition of these projects. Major repairs and rehabilitation will not prevent structural failure. By year 2000, the probability of major structural failure and catastrophic loss of navigation pools will become unacceptable. The completion of the new gated dam at Locks and Dam 2, together with completion of the Pool 2 relocations and raising of Pool 2, will provide significant risk mitigation while the balance of the authorized plan is under design and construction. The continued viability of the Lower Monongahela River Navigation system is vital to southwestern Pennsylvania and northeastern West Virginia. For example, Consolidation Coal Co. is constructing a coal transfer facility at river mile 58.1, which is 16.6 miles upstream of Locks and Dam 4. The proposed facility will receive up to 6 million tons per year of coal via rail from inland mines and an unspecified amount of coal per year by barge. The coal will be blended and barged to riverside customers. This facility will benefit from the improved reliability and efficiency to be provided by the authorized project.

Annual Benefits	Amount
Commercial Navigation Shallow Draft Locks	$330,200,000
Replacement of Shore-side Utilities	2,000,000
Total	$332,200,000

FISCAL YEAR 1996: The requested amount will be applied as follows:

Continue Real Estate Acquisition	$ 1,280,000
Continue Relocations	5,400,000
Continue Fish and Wildlife Activities	15,000
Continue Cultural Resource Activities	75,000
Continue Engineering and Design	6,955,000
Continue Construction Management	1,275,000
Total	$15,000,000

NON-FEDERAL COSTS: In accordance with the cost sharing and financing concepts reflected in the Water Resources Development Act of 1986, 50 percent of the total cost of construction will be derived from the Inland Waterways Trust Fund. Construction of the project will require modification to privately owned shore-side facilities and submarine utility crossings, all of which were constructed under Department of the Army permits pursuant to Section 10 of the Rivers and Harbors Act approved 3 March 1899. The estimated cost to owners of adapting these facilities to new project conditions is $111,000,000.

COMPARISON OF FEDERAL COST ESTIMATES: The current Federal cost estimate of $664,000,000 is a decrease of $86,000,000 over the latest estimate ($750,000,000) presented to Congress (FY 1995 Preconstruction Engineering and Design). This change includes the following items.

Item	Amount
Design Changes (Dam 2)	$-35,000,000
Price Escalation on Construction Features	-30,000,000
Post-Contract Award and Other Estimating Adjustments (including contingency adjustments)	-21,000,000
Total	$-86,000,000

In addition to the cost savings achieved to date, additional savings are anticipated from several initiatives that are in the preliminary stages of evaluation. These include design options for providing auxiliary lock capacity at Locks and Dam 4; in-stream disposal of dredged material; and the possible elimination of the need to raise a railroad bridge.

STATUS OF LOCAL COOPERATION: None required.

STATUS OF ENVIRONMENTAL IMPACT STATEMENT: The final Environmental Impact Statement was filed with the Environmental Protection Agency on 28 January 1992. The Record of Decision was signed by the Director of Civil Works on 17 December 1992. An Environmental Assessment and Draft Finding of No Significant Impact for Federal relocations were circulated in September, 1994.

OTHER INFORMATION: Funds to initiate preconstruction engineering and design were appropriated in FY 1992, and funds to initiate construction were appropriated in FY 1995.

APPROPRIATION TITLE: Construction, General - Locks and Dams (Navigation)

PROJECT: Robert C. Byrd Locks and Dam (formerly Gallipolis Locks and Dam), West Virginia and Ohio (Continuing)

LOCATION: Robert C. Byrd Locks and Dam is situated in the Middle Ohio Valley at Ohio River mile 279.2, about 14 miles downstream from the mouth of the Kanawha River in West Virginia and about 30 miles upstream from the City of Huntington, West Virginia. The new locks are in Mason County, West Virginia; the abutment of the dam is in Gallia County, Ohio.

DESCRIPTION: The Robert C. Byrd Locks and Dam project includes the rehabilitation of the existing non-navigable, high-lift, gated dam and construction of a new 1200′ by 110′ main lock and a new 600′ by 110′ auxiliary lock in a canal extending across a slight bend in the river, bypassing the existing locks and dam on the left descending (West Virginia) bank. The canal, in effect, straightens the river bend and provides a relatively straight down-bound approach for several miles. All work is programmed.

AUTHORIZATION: Rivers and Harbors Act of 1935, Supplemental Appropriations Act, 1985, and the Water Resources Development Act of 1986. The Water Resources Development Act of 1992, Section 118, changed the project name to the Robert C. Byrd Locks and Dam.

REMAINING BENEFIT-REMAINING COST RATIO: The remaining benefit-remaining cost ratio is no longer applicable because construction of the new locks is complete.

TOTAL BENEFIT-COST RATIO: 10.6 to 1 at 8-1/8 percent (FY 1993).

INITIAL BENEFIT-COST RATIO: 11.3 to 1 at 8-1/8 percent (FY 1985).

BASIS OF BENEFIT-COST RATIO: Benefits are from the General Design Memorandum, dated November, 1982, with costs at October, 1982 price levels.

SUMMARIZED FINANCIAL DATA			STATUS (1 Jan 1995)	PERCENT COMPLETE	COMPLETION SCHEDULE
New Construction Work					
Estimated Federal Cost		$304,000,000	Entire Project	80	Being Determined
General Appropriations	$152,000,000		Lock Construction	100	Jan 1993
Inland Waterways Trust Fund	152,000,000		Mitigation Sites	40	Being Determined
			Dam Rehabilitation	55	Being Determined

Division: Ohio River District: Huntington Robert C. Byrd Locks and Dam, WV & OH

SUMMARIZED FINANCIAL DATA (Continued)

Dam Rehabilitation		
Estimated Federal Cost		$ 80,000,000
General Appropriations	$ 40,000,000	
Inland Waterways Trust Fund	40,000,000	
Total Estimated Federal Cost		384,000,000
General Appropriations	192,000,000	
Inland Waterways Trust Fund	192,000,000	
Estimated Non-Federal Cost		0
Total Estimated Project Cost		$384,000,000

PHYSICAL DATA

Bypass Canal: Length - 1.7 miles
Bottom Width - 500 ft. (minimum)

Locks: Number - 2
Main Lock - 110 ' by 1,200'
Auxiliary Lock - 110' by 600'

Dam: Major rehabilitation of the existing navigation dam to include replacing the dam roller gates and strengthening the foundation.

Lands and Damages:	Acres
Total existing easement area	1,798
Required for existing Locks & Dam	82
Additional required for new locks & canal	546
Additional required for mitigation	837
Additional required for dam rehab	28

No residential structures are located in the affected area.

	GENERAL APPNS.	INLAND WATERWAYS TRUST FUNDS	ACCUM. PCT. OF EST. FED. COST
Allocations to 30 September 1994	$149,509,000	$149,509,000	
Conference Allowance for FY 1995	6,500,000	6,500,000	
Allocation for FY 1995	5,471,000 1/	5,471,000 1/	
Allocations through FY 1995	154,980,000	154,980,000	81
Allocation Requested for FY 1996	$ 5,000,000	$ 5,000,000	87
Programmed Balance to Complete after FY 1996	32,020,000	32,020,000	
Unprogrammed Balance to Complete after FY 1996	0	0	

1/ Reflects a total reduction of $2,058,000 assigned as savings and slippage and a total of $4,316,000 in programmed carryover into FY 1996.

JUSTIFICATION: Construction of the project eliminates a severe navigation hazard on the Ohio River and permits safe and efficient transportation through the project itself as well as completing a series of 1200' x 110' locks from near Pittsburgh to Cairo, Illinois. Reduced delays and transportation costs will benefit the economy of the nation directly and indirectly.

It is expected that the traffic levels at Robert C. Byrd Locks and Dam will follow the trends predicted in the authorization document. Commodity traffic projections reflect 75.0 and 93.5 million tons transiting the project in 2000 and 2020, respectively. During 1994, 50 million tons of traffic locked through the Robert C. Byrd project. Two other important factors bearing on the need to modernize Robert C. Byrd Locks and Dam are its age and condition and safety considerations. The Robert C. Byrd Locks and Dam is over 50 years old and has become increasingly difficult to operate and maintain. Lock outages have been a major problem and will become very critical in the future. It is well documented that the existing project is unsafe. Since the project is strategically located between the highly industrialized upper Ohio River Basin area and its product markets and supply regions, Robert C. Byrd Locks and Dam captures a significant portion of the commodities transiting the Ohio River. Consequently, the economies of the region and the nation will benefit by its construction.

Average annual benefits for the project are estimated at $161,318,000 at October, 1982 price levels

Annual Benefits	Amount
Navigation	$161,178,000
Recreation	140,000
Total	$161,318,000

FISCAL YEAR 1996: The total program amount, including the requested and programmed carryover amounts of $10,000,000 and $4,316,000, respectively, will be applied as follows:

	New Construction	Major Rehabilitation
Continue Construction of Locks	$ 3,709,000	$ 821,000
Continue Fish and Wildlife Construction	935,000	
Continue Replacement of Recreation Facilities	486,000	71,000
Continue Buildings, Grounds & Utilities Construction	343,000	
Continue Permanent Operating Equipment	748,000	510,000
Continue Engineering and Design	717,000	680,000
Continue Construction Management	1,290,000	1,521,000
Continue Dam Rehabilitation		1,897,000
Continue Channel/Canal Construction		488,000
Complete Bank Stabilization		100,000
Total	$ 8,228,000	$ 6,088,000

NON-FEDERAL COSTS: In accordance with the cost sharing and financing concepts reflected in the Water Resources Development Act of 1986, 50 percent of the total costs of construction will be derived from the Inland Waterways Trust Fund. The West Virginia Division of Natural Resources will be responsible for operation and management of mitigation lands at an estimated average annual cost of $55,000 for the Greenbottom area and $345,000 for the on-site mitigation (fish hatchery).

STATUS OF LOCAL COOPERATION: The West Virginia Division of Natural Resources, by lease agreement, has assumed responsibility for operation and management of the off-site mitigation area.

COMPARISON OF FEDERAL COST ESTIMATES: The current Federal cost estimate of $384,000,000 is no change from the latest estimate ($384,000,000) presented to Congress (FY 1995).

STATUS OF ENVIRONMENTAL IMPACT STATEMENT: The Final Environmental Impact Statement (EIS) was filed with the Environmental Protection Agency on 8 January 1981. Supplement I to the EIS was filed on 30 October 1991.

OTHER INFORMATION: Funds to initiate plans and specifications for the locks and access channel were allocated in FY 1984 ($100,000) and FY 1985 ($1,700,000) under the General Investigations appropriation. Funds to initiate construction were appropriated in FY 1985. The Water Resources Development Act of 1992, Section 118, changed the project name to the Robert C. Byrd Locks and Dam.

APPROPRIATION TITLE: Construction, General - Locks and Dams (Navigation)

PROJECT: Winfield Locks and Dam, West Virginia (Continuing)

LOCATION: Winfield Locks and Dam is located on the Kanawha River near Eleanor, West Virginia, approximately 31 miles above the confluence with the Ohio River. The pool is located entirely in West Virginia. The new lock will be located landward of the existing locks on the north side of the river with an additional gate bay between the old and new locks.

DESCRIPTION: The proposed modernization plan includes the construction of an additional 110′ by 800′ lock on the right descending bank landward of the existing locks and a 110-foot wide non-navigable gate bay. The new lock will be skewed six degrees landward (upstream to downstream) from the existing locks. The plan includes the continued use of both 56′ by 360′ lock chambers as auxiliary locks. The existing dam will also remain in use. All work is programmed.

AUTHORIZATION: The Supplemental Appropriations Act, 1985 for engineering and design and land acquisition, and the Water Resources Development Act of 1986 for construction.

REMAINING BENEFIT-REMAINING COST RATIO: 15.9 to 1 at 8-1/8 percent interest rate.

TOTAL BENEFIT-COST RATIO: 4.5 to 1 at 8-1/8 percent interest rate.

INITIAL BENEFIT-COST RATIO: 6.2 to 1 at 8-1/8 percent interest rate (FY 1985).

BASIS OF BENEFIT-COST RATIO: Benefits are from the Design Memorandum No. 1, General Design Memorandum, dated April, 1988.

SUMMARIZED FINANCIAL DATA		
Estimated Federal Cost		$377,000,000
General Appropriations	$188,500,000	
Inland Waterways Trust Fund	188,500,000	
Estimated Non-Federal Cost		0
Total Estimated Project Cost		$377,000,000

STATUS (1 Jan 1995)	PERCENT COMPLETE	COMPLETION SCHEDULE
Entire Project	20	Being Determined
Locks Operational	10	Apr 1997
HTRW Remediation	0	Being Determined

Division: Ohio River District: Huntington Winfield Locks and Dam, WV

SUMMARIZED FINANCIAL DATA (Continued)	GENERAL APPNS.	INLAND WATERWAYS TRUST FUNDS	ACCUM. PCT. OF EST. FED. COST
Allocations to 30 September 1994	$ 68,660,000	$ 68,660,000	
Conference Allowance for FY 1995	25,500,000	25,500,000	
Allocation for FY 1995	21,464,000 1/	21,464,000 1/	
Allocations through FY 1995	90,124,000	90,124,000	49
Allocation Requested for FY 1996	$ 5,920,000	$ 5,920,000	56
Programmed Balance to Complete after FY 1996	92,456,000	92,456,000	
Unprogrammed Balance to Complete after FY 1996	0	0	

1/ Reflects a total reduction of $8,072,000 assigned as savings and slippage and a total of $63,870,000 in programmed carryover into FY 1996.

PHYSICAL DATA

Lock:
  Number - 1
  Chamber - 110' by 800'
  Lift - 28 ft.

Lands and Damages:
  Acres - 1243 easement
  - 41 existing Locks and Dam
  - 316 new Lock
New Lock Site: Mobile home park (37 units), two active industries, and one non-active industry.

JUSTIFICATION: Winfield Locks and Dam links the Kanawha Valley, an important chemical and coal producing area, to its product markets and supply areas. Up-bound traffic through Winfield is composed of important supplies of chemicals, feedstocks, aggregates, and petroleum fuels. Down-bound traffic is composed largely of coal produced in the upper Kanawha River Basin and destined for electric generating facilities and coking plants throughout the middle and upper Ohio River Basin. The average annual tonnage from 1979-93 was 17.4 million tons. During 1993, 22.1 million tons of traffic locked through Winfield. Coal is the major commodity shipped on the Kanawha River, accounting for approximately 79 percent of the total tonnage.

JUSTIFICATION (Continued):

The existing Winfield project presents a significant impediment to the efficient flow of waterborne commerce due to its outdated features. Today, only 39 percent of the barges processed at Winfield are the size it was originally designed to serve and only two percent of the tows are small enough to be locked in a single operation. The average delay per tow was 12.1 hours in 1993 with an average of over 4 lockages per tow. The total processing time -- lockage plus delay time -- is 15.2 hours, the highest in the Ohio River system. Furthermore, Winfield traffic demand is projected to more than triple over the next 70 years, from 13 million tons in 1980 to 40 million tons by 2050, an annual growth rate of 1.8 percent.

Navigation safety has not been a major problem at Winfield Locks, but the potential for navigation accidents is present. This problem stems from the orientation of the locks and the design of the lock walls. The locks are located on the inside of a bend in the river that requires tows to make several maneuvers to enter and exit the locks. This is especially difficult during high river flows. With 800 foot long tows becoming more common, the short upper guard wall also presents a problem The upper guard wall is only 450 feet long, which means that about half of a tow extends beyond the end of the wall as lockage progresses. This presents a danger that the tow might break up and be swept down on the dam during high-flow conditions. As the number of large tows increases at Winfield, the probability of accidents occurring in such instances also increases.

Average annual benefits for the project total $56,109,000, all for commercial navigation.

FISCAL YEAR 1996: The total program amount, including the requested and programmed carryover amount of $11,840,000 and $63,870,000, respectively, will be applied as follows:

Complete Relocations	$ 60,000
Continue Phase IIB Construction	52,886,000
Continue Building, Grounds, Utilities Construction	2,580,000
Procure Permanent Operating Equipment	500,000
Continue Engineering and Design	3,848,000
Continue Construction Management	8,612,000
Continue Hazardous, Toxic and/or Radioactive Waste Removal	7,224,000
Total	$75,710,000

NON-FEDERAL COSTS: In accordance with the cost sharing and financing concepts reflected in the Water Resources Development Act of 1986, 50 percent of the total costs of construction will be derived from the Inland Waterways Trust Fund.

STATUS OF LOCAL COOPERATION: The West Virginia Division of Natural Resources has tentatively agreed to assume responsibility for operation and management of the mitigation area. Annual costs currently are estimated to be $30,000.

COMPARISON OF FEDERAL COST ESTIMATES: The current Federal cost estimate of $377,000,000 is an increase of $5,000,000 from the latest estimate ($372,000,000) presented to Congress (FY 1995). This change includes the following items.

Item	Amount
Price Escalation on Construction Features	$ 6,315,000
Post Contract Award and Other Estimating Adjustments (including contingency adjustments)	-1,315,000
Total	$ 5,000,000

STATUS OF ENVIRONMENTAL IMPACT STATEMENT: The final Environmental Impact Statement (EIS) was filed with the Environmental Protection Agency on 25 September 1987. In December, 1992, the Division Commander approved the Action Memorandum, which selected an appropriate removal action for hazardous substances found at the site. The removal action chosen in the Action Memorandum was discussed, along with other cleanup alternatives, in the Engineering Evaluation/Cost Analysis provided to the public and to Government agencies in May, 1992. A Supplemental Environmental Impact Statement (SEIS) was approved by the Ohio River Division Commander on 28 April 1993. The SEIS was prepared because of the need to realign the new lock as a result of hydraulic model testing.

OTHER INFORMATION: Funds to initiate preconstruction engineering and design were appropriated in FY 1985 and funds to initiate construction were appropriated in FY 1986. The construction site has been determined to contain hazardous substances that must be removed before construction can be completed.

The District has developed plans and specifications for the new lock construction to have minimum interference with river traffic during construction, but some interference is expected. This is compounded by the fact that traffic has greatly increased over the past several years and that the locks are at capacity. The District had established a dialogue with the towing industry to determine the best methods to use to minimize these risks. One such method being used by the towing industry is the use of helper boats.

APPROPRIATION TITLE: Construction, General - Local Protection (Flood Control)

PROJECT: Frankfort, South Frankfort, Kentucky (Continuing)

LOCATION: The project area of South Frankfort lies along the south bank of the Kentucky River in Frankfort, Kentucky, in the Bluegrass Region of central Kentucky.

DESCRIPTION: The project consists of approximately 3,811 feet of concrete floodwall and earthen levee, interior pumping facilities, and bank protection and will provide protection to 390 properties in South Frankfort. The Kentucky River drains an area of about 6,966 square miles in the central part of Kentucky and empties into the Ohio River at Mile 545.8.

AUTHORIZATION: The Flood Control Act of 1938, as modified by the Water Resources Development Act of 1990.

REMAINING BENEFIT-COST RATIO: 1.37 at 8 percent

TOTAL BENEFIT-COST RATIO: 1.3 at 8-3/4 percent.

INITIAL BENEFIT-COST RATIO: 1.1 at 8-3/4 percent (FY 1993).

BASIS OF BENEFIT-COST RATIO: Benefits are from the Project Design Memorandum, Frankfort, Kentucky, Local Flood Protection Project, South Frankfort Section, dated October, 1992.

SUMMARIZED FINANCIAL DATA		
Estimated Federal Cost		$ 8,630,000
Estimated Non-Federal Cost		2,880,000
Cash Contributions	$1,197,000	
Other Costs	1,683,000	
Total Estimated Project Cost		$11,510,000

STATUS (1 Jan 1995)	PERCENT COMPLETE	COMPLETION SCHEDULE
Entire Project	33	Sep 1996

PHYSICAL DATA

Floodwall Construction	3,811 ft.
Pump Station	2 ea.
Bank Stabilization	3,811 ft.
Historical Structure	1 ea.

Division: Ohio River District: Louisville Frankfort, South Frankfort, KY

SUMMARIZED FINANCIAL DATA (Continued)

		ACCUM. PCT OF EST. FED. COST
Allocations to 30 September 1994	$2,893,000	
Conference Allowance for FY 1995	3,700,000	
Allocation for FY 1995	3,114,000 1/	
Allocations through FY 1995	6,007,000	70
Allocation Requested for FY 1996	$2,623,000	100
Programmed Balance to Complete after FY 1996	0	
Unprogrammed Balance to Complete after FY 1996	0	

1/ Reflects a $586,000 reduction assigned as savings and slippage and $645,000 in programmed carryover into FY 1996.

JUSTIFICATION: The South Frankfort project encompasses approximately 117 acres of mostly residential property, with some public and commercial properties valued at about $160 million (October, 1992 price levels). The project is located on the left bank of the Kentucky River. The flood of record occurred in 1978. This flood crested at 18.5 feet above flood stage and remained above flood stage for six days. A recurrence of this flood would result in an estimated $51.5 million in damages at October, 1992 price levels. The project will provide protection against the recurrence of this flood, a 150-year event. Since the project was authorized in 1938, South Frankfort has suffered damaging floods on the average of about once every five years The most recent flood occurred in February, 1989 (50 year event) and resulted in more than $17 million in damages. Flooding has resulted in major disruptions to residences, businesses and State government offices as well as closure of schools.

Average annual benefits are $1,181,000 in flood damage reduction.

FISCAL YEAR 1996: The total program amount, including the requested and programmed carryover amounts of $2,623,000 and $645,000, respectively, will be applied as follows:

Continue Levee and Floodwall Construction	$2,622,000
Continue Engineering, and Design	226,000
Continue Construction Management	420,000
Total	$3,268,000

NON-FEDERAL COSTS: In accordance with the cost sharing and financing concepts reflected in the Water Resources Development Act of 1986, the non-Federal sponsor must comply with the requirements listed below

	Payments during Construction and Reimbursements	Annual Operation, Maintenance, Repair, Rehabilitation and Replacement Costs
Provide lands, easements, rights of way, and borrow and excavated or dredged material disposal areas	$1,549,000	
Modify or relocate utilities, roads, bridges (except railroad bridges), and other facilities, where necessary for the construction of the project.	134,000	
Pay 10.5 percent of the costs allocated to flood control to bring the total non-Federal share of flood control costs to 25 percent and bear all costs of operation, maintenance, repair, replacement, and rehabilitation of flood control facilities	1,197,000	$20,000
Total Non-Federal Costs	$2,880,000	$20,000

The non-Federal sponsor has agreed to make all required payments concurrently with project construction.

STATUS OF LOCAL COOPERATION: The non-Federal cost sharing partner is the City of Frankfort, Kentucky. To meet its financial requirements, the City has received an allocation in Kentucky House Bill No 799, 30 March 1990, not to exceed one-half of the non-Federal cost or $2 4 million, whichever is less. The City has allocated $1,271,000 from the City's General fund and Public Transit Accounts and has set aside $1,225,000 in additional bonding capability with either the Kentucky League of Cities Bond Pool or First Kentucky Securities Corp A Project Cooperation Agreement (PCA) was executed in November, 1991; however, the document excluded reference to Federal and non-Federal cost shares due to the lack of an approved technical document and cost estimate The technical document (April, 1991 Reevaluation Report with November, 1991 Supplement) subsequently was approved on 22 April 1992 A modified PCA that includes the appropriate cost shares was executed in July, 1993. The City has acquired lands for the first and second construction contracts and will complete acquisition for the third and final contract in January, 1995. Our assessment of the non-Federal sponsor's financial capability to participate in the project affirms that the sponsor has a reasonable and implementable plan for meeting its financial commitment.

COMPARISON OF FEDERAL COST ESTIMATES: The current Federal cost estimate of $8,630,000 reflects no change from the latest estimate ($8,630,000) presented to Congress (FY 1995).

STATUS OF ENVIRONMENT IMPACT STATEMENT: An environmental assessment was completed during the reevaluation study, and a signed Finding of No Significant Impacts was included in the November, 1991 Supplement to the Reevaluation Report.

OTHER INFORMATION: Funds to initiate Preconstruction Engineering and Design were appropriated in FY 1987 and funds to initiate construction were appropriated in FY 1993.

APPROPRIATION TITLE: Construction, General - Local Protection Project (Flood Control)

PROJECT: West Columbus, Ohio (Continuing)

LOCATION: The project is located in Columbus, Ohio, adjacent to the downtown area in Franklin County.

DESCRIPTION: The proposed project consists of a 5.2 mile system including levee, floodwall, and high ground; 14 gate closures; interior drainage facilities; two new pump stations; and reworking of two existing pump stations. The protected area contains about 1,200 acres and is completely urban with a mix of residential, industrial, and commercial development. The project will provide standard project flood level of protection for the area. All work is programmed.

AUTHORIZATION: The project was authorized for construction by the Water Resources Development Act of 1988, as amended by the Water Resources Development Act of 1990.

REMAINING BENEFIT-REMAINING COST RATIO: 2.0 to 1 at 8-3/4 percent.

TOTAL BENEFIT-COST RATIO: 1.6 to 1 at 8-3/4 percent.

INITIAL BENEFIT-COST RATIO: 1.3 to 1 at 8-3/4 percent (FY 1993).

BASIS OF BENEFIT-COST RATIO: Benefits are from the Reevaluation Report, dated September, 1991, updated to October, 1994 price levels.

SUMMARIZED FINANCIAL DATA

Estimated Federal Cost		$ 83,250,000
Estimated Non-Federal Cost		27,750,000
Cash Contributions	$ 8,250,000	
Other Costs	19,500,000	
Total Estimated Project Cost		$111,000,000

STATUS (1 Jan 1995)	PERCENT COMPLETE	COMPLETION SCHEDULE
Entire Project	9	Being Determined

PHYSICAL DATA

Levee and Floodwall: 19,600 feet plus 7,000 feet of high ground. Heights range from 2 feet to 18 feet.
Gate Closures: 14 (1,100 feet)
Lands and Damages: 130 acres easement
Pump Stations: 2 (180,000 and 100,000 GPM)

Division: Ohio River District: Huntington West Columbus, OH

6 February 1995

SUMMARIZED FINANCIAL DATA (Continued)		ACCUM. PCT OF EST. FED. COST
Allocations to 30 September 1994	$13,340,000	
Conference Allowance for FY 1995	8,000,000	
Allocation for FY 1995	7,200,000 1/	
Allocations through FY 1995	20,540,000	25
Allocation Requested For FY 1996	$ 2,800,000	28
Programmed Balance to Complete after FY 1996	59,910,000	
Unprogrammed Balance to Complete after FY 1996	0	

1/ Reflects a $800,000 reduction for savings and slippage and $9,772,000 in programmed carryover into FY 1996.

JUSTIFICATION: The West Columbus area contains a mix of residential, commercial, and industrial development that is subject to flooding. The maximum flood of record occurred in March, 1913, and the second most severe and most recent flooding occurred in January, 1959 A recurrence of these floods would cause damages of $293,000,000 and $247,000,000, respectively. The value of the property subject to flooding is $415,000,000

Average annual benefits for the project total $17,549,000, all of which are for urban flood damage reduction.

FISCAL YEAR 1996: The total program amount, including the requested and programmed carryover amounts of $2,800,000 and $9,772,000, respectively, will be applied as follows:

Continue Levee and Floodwall Construction	$ 6,047,000
Continue Engineering and Design	5,285,000
Continue Construction Management	1,240,000
Total	$12,572,000

NON-FEDERAL COSTS: In accordance with the cost sharing and financing concepts reflected in the Water Resources Development Act of 1986, the non-Federal sponsor must comply with the requirements listed below

Requirements of Local Cooperation	Payments During Construction and Reimbursements	Annual Operation, Maintenance, and Replacement Costs
Provide lands, easements, rights of way, and borrow and excavated or dredged material disposal areas.	$ 1,260,000	
Modify or relocate buildings, utilities, roads, bridges (except railroad bridges), and other facilities, where necessary for the construction of the project.	18,240,000	
Pay a cash contribution of 7.43 percent of the costs allocated to flood control to bring the total non-Federal share of flood control costs to 25 percent, and bear all costs of operation, maintenance, repair, replacement, and rehabilitation of flood control facilities.	8,250,000	$135,000
Total Non-Federal Costs	$27,750,000	$135,000

The non-Federal sponsor has agreed to make all required payments concurrently with project construction.

STATUS OF LOCAL COOPERATION: The non-Federal sponsor is the City of Columbus, Ohio. A Project Cooperation Agreement with the City was executed in July, 1993. The City has provided $3,035,000 of its cash contribution for the project.

COMPARISON OF FEDERAL COST ESTIMATES: The current Federal cost estimate of $83,250,000 is an increase of $3,000,000 over the previous estimate ($80,250,000) presented to Congress (FY 1995). This change includes the following item.

Item	Amount
Price Escalation on Construction Features	$ 3,000,000
Total	$ 3,000,000

STATUS OF ENVIRONMENTAL IMPACT STATEMENT: An Environmental Assessment (EA) and Finding of No Significant Impact (FONSI) were signed in November, 1986. A revised EA and FONSI were signed in April, 1993.

OTHER INFORMATION: Funds to initiate preconstruction engineering and design were appropriated in FY 1989 and funds to initiate construction were appropriated in FY 1993. Award of the first construction contract, Dry Run Levee Phase IA, occurred in September, 1993. A contract with the Ohio Department of Transportation (ODOT) for the construction by ODOT of gate closures at Souder Avenue and S.R. 315 and for modification of the I-670 embankment was executed on 3 March 1994. ODOT will accomplish this work as part of its ongoing highway construction efforts within the project area.

APPROPRIATION TITLE: Construction, General - Local Protection Projects (Flood Control)

PROJECT: Turtle Creek, Pennsylvania (Continuing)

LOCATION: The project is located in Allegheny County near Pittsburgh, Pennsylvania.

DESCRIPTION: The project consists of repair and restoration of the existing Turtle Creek Local Protection Project, a Federally constructed channel improvement project on lower Turtle Creek and lower Thompson Run. The existing project was constructed during the period 1962-1967. The repair and restoration project consists of debris and sediment removal from the Turtle Creek and Thompson Run channels and debris basin; clearing trees and brush from channel side slopes; restoration of channel side slopes; repairs to concrete retaining walls, debris dams, trash racks, spalled concrete joints and drainage appurtenances; and removal of vegetative growth from weepholes. All work is programmed.

AUTHORIZATION: The Flood Control Act of 1958 authorized the existing channel improvement project on Turtle Creek. The Supplemental Appropriations Act, 1985 specified that the Secretary of the Army, acting through the Chief of Engineers, is authorized and directed to perform necessary channel and associated work in connection with the Turtle Creek, Pennsylvania, local protection project.

REMAINING BENEFIT-REMAINING COST RATIO: Not applicable since construction of the original project has been completed.

TOTAL BENEFIT-COST RATIO: Not applicable since the current project is restoration and repair of the original project.

INITIAL BENEFIT-COST RATIO: 2.2 to 1 at 2 5/8 percent (FY 1962).

BASIS OF BENEFIT-COST RATIO: Not applicable.

SUMMARIZED FINANCIAL DATA

Original Project		
Actual Federal Cost		$15,351,000
Actual Non-Federal Cost		1,840,000
Cash Contributions	$ 0	
Other Costs	1,840,000	
Total Actual Original Project Cost		$17,191,000

SUMMARIZED FINANCIAL DATA (Continued)

STATUS (1 Jan 1995)	PERCENT COMPLETE	COMPLETION SCHEDULE
Restoration Project	16	Jul 1996

Repair and Restoration Work

			ACCUM. PCT. EST. FED. COST
Estimated Federal Cost		$ 7,050,000	
Estimated Non-Federal Cost		2,350,000	
Cash Contributions	$2,350,000		
Other	0		
Total Estimated Cost		$ 9,400,000	
Allocations to 30 September 1994		$ 2,448,000	
Conference Allowance for FY 1995		750,000	
Allocation for FY 1995		2,638,000 1/	
Allocations through FY 1995		5,086,000	72
Allocation Requested for FY 1996		1,964,000	100
Programmed Balance to Complete after FY 1996		0	
Unprogrammed Balance to Complete after FY 1996		0	

PHYSICAL DATA

Removal of debris and sediment
Clearing trees and brush from side slopes
Restoration of channel side slopes
Structural repairs
Removal of vegetative growth from weepholes

Original Project Plus Repair and Restoration Work

Estimated Federal Cost		$22,401,000
Estimated Non-Federal Cost		4,190,000
Cash Contributions	$ 2,350,000	
Other	1,840,000	
Total Estimated Cost		$26,591,000
Allocations to 30 September 1994		$17,799,000
Conference Allowance for FY 1995		750,000
Allocation for FY 1995		2,638,000 1/
Allocations through FY 1995		20,437,000
Allocation Requested for FY 1996		1,964,000
Programmed Balance to Complete after FY 1996		0
Unprogrammed Balance to Complete after FY 1996		0

Division: Ohio River District: Pittsburgh Turtle Creek, PA

1/ Reflects a $119,000 reduction assigned as savings and slippage, $2,007,000 reprogrammed into the project, and $1,976,000 in programmed carryover into FY 1996.

JUSTIFICATION: The original Turtle Creek local protection project, constructed during the period 1962-1967, consists principally of channel excavation; concrete and stone lining; cantilever and bar anchored steel sheet pile walls; concrete cantilever and gravity walls; alterations to the Westinghouse Electric Corporation backwater flood gate and sill; raising of railroad tracks and bridge; a new railroad bridge; protection of various bridge substructures, five concrete drop structures on Thompson Run; six debris basins on Turtle Creek and tributaries; the removal of buildings and stone walls; and the alterations of numerous utility lines and structures.

No sediment removal work has been accomplished by local interests to date since the project was completed and cleaned out with Federal disaster funds following the June, 1972 flooding and turned over to the local interests on 13 December 1972. Consequently, the flood height reducing capabilities have significantly deteriorated due to the accumulation of silt deposits. In effect, particularly through the lower reaches of the project below Thompson Run, the Turtle Creek channel improvement project can no longer contain the 100-year flood (16,800 cfs) as indicated by the National Flood Insurance Program through the communities of East Pittsburgh, Turtle Creek, and North Versailles Township.

In addition, deficiencies also still exist in other reaches of both Turtle Creek and Thompson Run. They include sedimentation, wild growth, eroded side slopes and damaged access ramps. Debris basins on Dirty Camp Run, Ardmore Boulevard and Thompson Run are completely filled in with sediment. In addition, the drop structures on Thompson Run cannot serve their intended purpose due to the sediment buildup immediately below each drop structure.

Project conditions have changed to the point where flood hazard conditions are no longer as represented by project design and in the National Flood Insurance Program. The changed flood hazard conditions are documented by the periodic project inspections and a sediment monitoring program in the lower 8,800 feet of the Turtle Creek channel, below Thompson Run, from 1975 through 1982. During this period, the District has taken 38 cross sections annually and computed the volume of sediment buildup in the channel. Using this detailed data, the total volume of sediment deposition over and above "As Built" conditions has been estimated to be almost 150,000 cubic yards in this reach alone. Annual inspections indicate no change or improvement in this severe sediment problem. In addition, hydrologic analyses have highlighted significant flood hazard changes.

The existing project has prevented a cumulative total of flood damages estimated to be over $83,659,000 through FY 1993.

FISCAL YEAR 1996: The total program amount, including the requested and programmed carryover amounts of $1,964,000 and $1,976,000, respectively, will be applied as follows:

Continue Real Estate	$ 40,000
Continue Channel Restoration	3,680,000
Continue Engineering & Design	20,000
Continue Construction Management	200,000
Total	$3,940,000

NON-FEDERAL COSTS: In accordance with the cost sharing and financing concepts reflected in the Water Resources Development Act of 1986, the non-Federal sponsor must comply with the requirements listed below:

Requirements of Local Cooperation	Payments During Construction and Reimbursements	Annual Operation, Maintenance, and Replacement Costs
Provide lands, easements, rights-of-way, and borrow and excavated or dredged material disposal areas.	$ 0	
Modify or relocate buildings, utilities, roads, bridges (except railroad bridges), and other facilities, where necessary for the construction of the project.	0	
Pay a cash contribution of 25 percent of the costs allocated to flood control to bring the total non-Federal share of flood control costs to 25 percent, and bear all costs of operation, maintenance, repair, replacement, and rehabilitation of flood control facilities.	2,350,000	459,000
Total Non-Federal Costs	$2,350,000	$459,000

The non-Federal sponsor has agreed to make all required payments concurrently with project construction.

STATUS OF LOCAL COOPERATION: The Turtle Creek Flood Control Authority was the local sponsor for the existing project. However, the Authority is unable financially sponsor the project restoration or subsequently to perform any required project maintenance. Consequently, the District coordinated with other units of government and was advised by the Allegheny County, Pennsylvania, Board of Commissioners that the County would sponsor the repair and restoration project. A Local Cooperation Agreement (LCA) package containing a financial analysis, financing plan and statement of financial capability from Allegheny County was approved on 3 June 1992. The LCA was executed in August, 1992. Since the execution of the LCA, Allegheny County has obtained all the real estate interests necessary for the repair and restoration project.

COMPARISON OF FEDERAL COST ESTIMATES: The current project cost estimate of $9,400,000 is an increase of $2,800,000 from the last estimate presented to Congress. This change includes the following items.

Item	Amount
Post Contract Award and Other Estimating Adjustments (including contingency adjustments)	$2,800,000
Total	$2,800,000

STATUS OF ENVIRONMENTAL IMPACT STATEMENT: A Section 401 water quality certification originally was not required since this project is within the guidelines of the Corps of Engineers Nationwide Permit No. 3, Maintenance of Existing Structures and Fills. However, current regulations require the District to obtain a 401 certification from the State. The certification was received on 6 January 1995. The Environmental Assessment (EA) was revised to include recent Hazardous, Toxic and/or Radioactive Waste (HTRW) test results. A Finding of No Significant Impact (FONSI) was signed on 28 January 1991. In order to quantify the amount of material required to be deposited at an approved landfill, additional environmental sampling was conducted in May and June of 1993. Afterwards, a HTRW report was prepared that indicated no significant environmental problems.

OTHER INFORMATION: The original project was constructed during the period 1962-1967 at a Federal cost of $15,351,000. Funds to initiate construction of the repair and restoration project were appropriated in FY 1985.

APPROPRIATION TITLE: Construction, General - Local Protection (Flood Control)

PROJECT: Levisa and Tug Forks of the Big Sandy River and Upper Cumberland River, West Virginia, Virginia and Kentucky (Continuing)

LOCATION: The Levisa and Tug Forks are situated in southwestern West Virginia, southeastern Kentucky, and western Virginia. The two streams converge at the twin towns of Fort Gay, West Virginia, and Louisa, Kentucky, to form the Big Sandy River. The Levisa Fork Basin encompasses about 2,326 square miles. The project area includes the mainstem Levisa Fork from Louisa, Kentucky, to Grundy, Virginia (approximately 100 stream miles excluding Fishtrap Lake), and the mainstem Russell Fork from its confluence with the Levisa Fork, to and including Haysi, Virginia (approximately 31 stream miles). The Tug Fork Basin encompasses about 1,555 square miles. The project area is comprised of approximately 140 stream miles from Louisa, Kentucky to Welch, West Virginia. The Upper Cumberland River Basin encompasses about 1,977 square miles. Approximately 132 stream miles of the Cumberland River from its origin at Harlan, Kentucky, to Cumberland Falls are included in the project area.

DESCRIPTION: The project includes the construction of levees, floodwalls and pump stations, a flood control reservoir, the floodproofing and evacuation of structures located in the flood hazard areas, and development of relocation sites for the affected areas. Work is complete at Williamson, West Virginia, South Williamson, Kentucky, and Pineville, Kentucky. Only work at Matewan, West Virginia and Grundy, Virginia is programmed. All other work is unprogrammed. (See status and completion schedule).

AUTHORIZATION: Energy and Water Development Appropriations Act, 1981, and Water Resources Development Act of 1986.

REMAINING BENEFIT-REMAINING COST RATIO: Not Applicable. 1/

TOTAL BENEFIT-COST RATIO: Not Applicable. 1/

INITIAL BENEFIT-COST RATIO: Not Applicable. 1/

BASIS OF BENEFIT-COST RATIO: Not Applicable. 1/

1/ An overall project benefit-cost ratio was not computed because the Congress, in the Energy and Water Development Appropriations Act, 1981, found that the benefits attributable to the flood control measures authorized by the Act exceed their costs.

Division: Ohio River District: Huntington/Nashville Levisa and Tug Forks of the Big Sandy River and Upper Cumberland River, WV, VA, & KY

SUMMARIZED FINANCIAL DATA				ACCUM. PCT. OF EST. FED. COST
Estimated Total Federal Cost			$1,441,600,000	
Funded and Programmed Construction		$615,610,000		
Unprogrammed Construction		825,990,000		
Estimated Total Non-Federal Cost			$ 122,425,000	
Funded and Programmed Construction		$49,140,000		
Cash Contributions	$30,540,000			
Other Costs	$18,600,000			
Unprogrammed Construction		73,285,000		
Cash Contributions	73,285,000			
Other Costs	0			
Total Estimated Funded and Programmed Construction Cost			$ 664,750,000	
Total Estimated Unprogrammed Construction Cost			899,275,000	
Total Estimated Project Cost			$1,564,025,000	
Allocation to 30 September 1994			$492,456,000	
Conference Allowance for FY 1995			53,750,000	
Allocation for FY 1995			49,983,000 2/	
Allocations through FY 1995			542,439,000	37
Allocation Requested for FY 1996			6,300,000	37
Programmed Balance to Complete after FY 1996			66,871,000	
Unprogrammed Balance to Complete after FY 1996			825,990,000	

2/ Reflects a $3,767,000 reduction assigned as savings and slippage and $11,479,000 in programmed carryover into FY 1996.

STATUS (1 Jan 1995)	PERCENT COMPLETE	COMPLETION SCHEDULE
Structural Measures		
Williamson Area, WV	100	
Matewan, WV	70	Apr 1997
South Williamson, KY	100	
Grundy, VA	0	Being Determined
Haysi Dam, VA	0	Indefinite
Pineville, KY	100	
Barbourville, KY (Cutoff)	100	
Barbourville, KY Levee/Fldwall	99	Mar 1995
Harlan, KY	53	Indefinite
Williamsburg, KY	5	Indefinite
Middlesborough, KY	0	Indefinite
Detailed Project Reports		
Tug Fork:		
Matewan, WV	100	
South Williamson, KY	100	
Lower Mingo Co. (Kermit), WV	100	
Martin Co., KY	15	Sep 1997
Pike Co. (Tug Fork), KY	100	
McDowell Co., WV	10	Being Determined
Upper Mingo Co., WV	80	Jun 1995
Wayne Co., WV	10	Jun 1997
Lawrence Co. (Tug Fork), KY	0	Indefinite
Tribs.-Mingo Co., WV	0	Being Determined
Tribs.-Wayne Co., WV	0	Being Determined
Tribs.-Pike Co., KY	0	Being Determined
Tribs.-Buchanan Co., VA	0	Being Determined
Tug Fork GDM	100	
Matewan, Hatfield Bottom, WV	100	
Project Coordination	100	
Levisa Fork:		
Grundy, VA	85	Jun 1995
Levisa Basin/Haysi Dam	85	Sep 1996
Detailed Project Reports (continued)		
Levisa Fork (continued)		
Pike Co. (Levisa Fork), KY	0	Indefinite
Floyd Co., KY	0	Indefinite
Johnson Co., KY	0	Indefinite
Dickenson Co., VA	0	Indefinite
Lawrence Co. (Levisa), KY	0	Indefinite
Town of Martin, KY	0	Indefinite
Upper Cumberland:		
Harlan, KY	100	
Williamsburg, KY	100	
Middlesborough, KY	100	
Upper Cumberland River Basin	100	
Clover Fork, KY	90	Sep 1995
City of Cumberland, KY	21	Being Determined
Harlan Co., KY	0	Being Determined
Bell Co., KY	0	Being Determined
Knox Co., KY	0	Being Determined
Whitley Co., KY	0	Being Determined
Nonstructural Measures		
Williamson, WV	100	
Matewan, WV	95	Jul 1995
Matewan, Hatfield Bottom, WV	15	Indefinite
South Williamson, KY	95	Sep 1996
Lower Mingo Co. (Kermit), WV	30	Indefinite
Grundy, VA	0	Being Determined
Pineville, KY	100	
Harlan, KY	22	Indefinite
Barbourville, KY	52	Sep 1996
Pike County, KY (Tug Fork)	5	Indefinite
Williamsburg, KY	1	Indefinite
Upper Mingo County, WV	0	Indefinite
Middlesborough, KY	0	Indefinite
Levisa Basin, VA & KY	0	Indefinite

PHYSICAL DATA

WILLIAMSON AREA

Williamson (CBD) Floodwall:
Height - 22 ft. (avg)
Length - 3,900 ft.
Pump Stations - 2 (30,000 and 70,000 GPM)

Lands and Damages:
Acres - 18.24 fee
5.76 easement
Type - Urban

Relocations:
Railroad, highways,
city & public utilities

West Williamson Floodwall:
Height - 17 ft. (avg)
Length - 6,237 ft.
Pump Stations - 1 (40,000 GPM)

Lands and Damages:
Acres - 25.72 fee
31.03 easement
Type - Urban

Relocations:
Railroad, highways,
city and public utilities

Snagging and Clearing:
Length - 2.3 mi.

Lands and Damages:
Acres - 86.62 easement
Type - Riverbank

GRUNDY

Floodwall:
Height - 10 ft. (avg)
Length - 810 ft.
18,000 GPM Pump Station

Relocations:
Fire Station
Maple Street
Footbridges & utilities

Lands and Damages:
Acres - 132 fee
13 tracts, 3 structures

MATEWAN

Fill/Wall:
Height - 13 ft. (avg)
Length - 2,500 ft.
Pump Stations - 1 (18,000 GPM)

Relocations: Hwy. 49 and bridge; Rte. 9; fire station Town hall; and utilities

Lands and Damages:
Acres - 45.41 fee
48.88 easement

SOUTH WILLIAMSON

Floodwall:
Height - 21 ft. (avg)
Length - 2,700 ft.
Pump Stations - 1 (12,000 GPM)

Lands and Damages:
Acres - 21.52 fee
5.46 easement
Type - Residential

Relocations:
School cafeteria, highways,
county and public utilities

PINEVILLE

Highway/Levee/Floodwall:
Height - 25 ft. (avg)
Length - 7,800 ft.

Relocations:
Wallsend Bridge
Pine Street Bridge

Wallsend Levee:
Height - 25 ft. (avg)
Length - 4,300 ft.

Lands and Damages:
Acres - 118
Type - Urban

PHYSICAL DATA (Continued)

BARBOURVILLE

Cutoff:
Type - High flow diversion
Dimensions - 150 ft. width
- 40 ft. max. depth
Length - 5,000 ft.

Lands and Damages:
Acres - 55
Type - Agricultural

Levee/Floodwall:
Height - 26 ft. (avg)
Length - 19,536 ft.

Lands and Damages:
Acres - 11
Type - Urban

Relocations:
Highway 459 Bridge

WILLIAMSBURG

Levee/Floodwall
Height - 10 ft. (avg)
Length - 3,500 ft.

MIDDLESBOROUGH

Channel:
Length - 5.2 mi.

Lands and Damages:
Acres - 132

HAYSI DAM

Dam: Type - Concrete Arch
Height - 202 ft.
Length - 825 ft.

Spillway:
Type - Ogee Weir
Length - 170 ft.
Discharge - 151,000 CFS

Lands and Damages:
Acres - 8,335 Fee
Type - Rural residential & subsistence farms
Improvements - Predominantly farm bldgs. and residential

Reservoir (Net Acre-Feet):

Flood Control	28,400
Conservation	8,870
Total	37,270

HARLAN

Harlan Diversion Tunnel:
Length - 2,000 ft.

Lands and Damages:
Acres - 12
Type - Urban

Relocations:
KY Hwy. 38 Bridge
KY Hwy. 72 Bridge

Loyall Diversion:
Length - 3,800 ft.
Max. Depth - 300 ft.

Lands and Damages:
Acres - 33
Type - Urban

Relocations:
KY Hwy. 840 Bridge
Park Drive Bridge
Highway 413
Loyall Railway

Levees/Floodwalls (Four locations):
Length - 14,000 ft.
Height - 23 ft. (average)

NON-STRUCTURAL - Primarily voluntary relocations from flood prone areas and floodproofing of unprotected development suitable for such measures. Specific physical data will be determined during preparation of project reports for each individual project.

DETAILED PROJECT REPORTS - Advance planning will continue at other locations in the authorized planning area to determine the extent of flood problems and to formulate implementable solutions to these problems.

JUSTIFICATION: Tug Fork - Historically, persistent, repetitive flooding in the Tug Fork Valley has brought extensive damage to homes and other cultural developments. During the past 38 years, major floods occurred in January, 1957, March, 1963, March, 1967, April, 1977, and May, 1984. The 1977 flood was the flood of record along much of the Tug Fork. This devastating flood caused valley-wide damages approaching $200 million at 1977 price levels. Six hundred homes were totally destroyed and 4,700 homes were flooded. Physical losses from direct damage to non-residential buildings and contents exceeded $41 million. Over half of all damages occurred in Mingo County, West Virginia. Pike County, Kentucky had about $45 million in damages. The May, 1984 flood resulted in an estimated $117 million in damages along the Tug Fork. As in previous floods, the extensive bituminous coal mining industry of the basin was disrupted due to direct damage, interrupted transportation, and lost time because of diversions of the work force to flood fighting and cleanup.

Levisa Fork - The same persistent, repetitive flooding characteristic of the Tug Fork has plagued the Levisa Fork area. During the April, 1977 flood, damages amounted to approximately $93 million, as measured in 1977 price levels. The May, 1984 flood caused an additional $90 million in losses along the mainstem of the Levisa Fork and its primary upstream tributary, Russell Fork. Impacts on residential properties, commercial and transportation facilities, and the mining industry were similar to those described in the Tug Fork areas.

Upper Cumberland - Flooding continues to bring recurring damage to the Upper Cumberland area. Total damages in all categories amounted to $34.7 million for this area during the April, 1977 event. The Pineville element protects about 185 acres of urban land containing structures valued at $25.7 million At Barbourville, the existing project was sandbagged during the April, 1977 flood event, preventing major losses to some 700 acres of urban land containing structures valued at $52.4 million. The currently unprotected area is a mix of agriculture/urban land use and contains structures valued at over $6.0 million. During the 1977 flood, no area of Harlan County escaped damage; four persons drowned and approximately 1,800 persons were left homeless. Total flood damage and associated costs came to almost $31 million.

The following counties qualify as areas of "substantial and persistent" unemployment: West Virginia - Mingo, McDowell, Wayne; Kentucky - Martin, Pike, Lawrence, Floyd, Johnson, Bell, Harlan, Knox, Letcher, Whitley; Virginia - Dickenson.

FISCAL YEAR 1996: The total program amount, including the requested and programmed carryover amounts of $6,300,000 and $11,479,000, respectively, will be applied as follows:

Structural Measures	
Matewan, West Virginia	
Continue Land Acquisition	$ 260,000
Continue Relocations	3,664,000
Continue Floodwall/Pump Station Construction	5,112,000
Continue Engineering and Design	500,000
Continue Construction Management	560,000
Subtotal	$10,096,000
Detailed Project Reports	
Huntington District	
McDowell County, WV	$ 1,620,000
Martin County, KY	670,000
Levisa Fork Basin, KY & VA	333,000
Wayne County, WV	880,000
Subtotal	$ 3,503,000
Nashville District	
Harlan County, KY	800,000
Cumberland, KY	800,000
Subtotal	$ 1,600,000
Nonstructural Measures	
Grundy, Virginia	
Initiate Land Acquisition	$ 900,000
Initiate Relocations	1,083,000
Engineering and Design	597,000
Subtotal	$ 2,580,000
Total	$17,779,000

NON-FEDERAL COSTS: In accordance with Section 202, Energy and Water Development Appropriations Act, 1981 and Public Law 99-662, non-Federal interests must bear all costs of operation, maintenance, and replacement of completed facilities. Project elements under construction on 30 April 1986 are exempted from construction cost sharing in accordance with the Water Resources Development Act of 1986. These elements are Williamson Area, West Virginia; South Williamson, Kentucky; Matewan, West Virginia; and Pineville, Kentucky. The Harlan and Barbourville elements were exempted from construction cost sharing by Title I, Section 103 of Water Resources Development Act of 1986. The Hatfield Bottom area of Matewan, West Virginia, was included in the Matewan, West Virginia, element area by the Energy and Water Development Appropriations Act, 1991, Public Law 101-514, and as such, is exempt from construction cost sharing.

Construction cost sharing is required for all other elements in accordance with the Water Resources Development Act of 1986. The sponsor of each project element for which construction is initiated after 30 April 1986 must provide lands, easements, rights-of-way, and borrow and excavated or dredged material disposal areas; modify or relocate buildings, utilities, roads, bridges (except railroad bridges), and other facilities, where necessary for the construction of the element; pay a cash contribution of no less than 5 percent of the costs allocated to structural flood control to bring the total non-Federal share of structural flood control costs to 25 percent; and bear 25 percent of non-structural flood control costs, including the value of real estate interests and relocations contributed by the sponsor. In accordance with Section 103(m) of the Act, these requirements are subject to the ability of the non-Federal sponsor to pay.

	Payments During Construction and Reimbursements (Funded/Programmed Work)	Payments During Construction and Reimbursements (Unprogrammed Work)	Annual Operation, Maintenance, and Replacement Costs
Williamson Area, WV	$ 0	$ 0	$ 71,000
Matewan, WV	0	0	30,000
South Williamson, KY	0	0	8,000
Pineville, KY	17,800,000 3/	0	20,000
Barbourville, KY	0	0	20,000
Grundy, VA	28,800,000 4/	0	21,500
Harlan, KY	0	0	20,000
Lower Mingo County, WV	1,280,000	2,820,000	0
Williamsburg, KY	330,000	670,000	35,000
Pike County, KY	610,000	1,815,000	0
Upper Mingo County, WV	70,000	1,230,000	0
Middlesborough, KY	250,000	1,150,000	27,000
Haysi Dam	0	8,700,000	486,400
Levisa Basin	0	56,900,000	0
Total Non-Federal Cost	$49,140,000	$73,285,000	$738,900

3/ In cooperation with the Commonwealth of Kentucky, an integrated highway/floodwall element has been constructed at Pineville, Kentucky. The element provides flood protection for Pineville and Wallsend communities in conjunction with a four-lane improvement to U.S. Highway 25E through Pineville.

4/ Items of cooperation for the Grundy, Virginia element are as follows.

	Total	Federal	Town of Grundy		Virginia DOT	
Downtown Floodwall	$13,000,000	$ 7,250,000	$ 650,000	5% cash share.	$ 3,050,000	50% credit, common project/highway LERRD needed for floodwall.
			2,050,000	Project LERRD.		
Relo. Schools/ Develop Site	17,600,000	4,350,000	1,450,000	25% share, least cost alternative.	3,700,000	Excess credit for nonstructural project/highway LERRD, applied toward locally preferred plan.
			8,100,000	Cash for locally preferred plan.		
Nonstructural Measures	39,200,000	29,400,000	0		9,800,000	50% credit, common project/highway LERRD needed for nonstructural, up to 25 pct. of nonstructural cost.
Total	$69,800,000	$41,000,000	$12,250,000		$16,550,000	

STATUS OF LOCAL COOPERATION:

The City of Barbourville, Kentucky signed a Section 221 Agreement for the Barbourville element on 14 February 1984, agreeing to assume operation and maintenance of the element after construction is complete.

The City of Pineville, Kentucky signed a Section 221 Agreement for the Pineville element on 19 February 1983, agreeing to assume operation and maintenance of the element after construction is complete. The District and the Commonwealth of Kentucky executed a cost-sharing arrangement for the combined flood protection/four-lane highway project at Pineville.

The County of Harlan, Kentucky signed a Section 221 Agreement for the Harlan element on 20 October 1988, agreeing to assume operation and maintenance of the element after construction is complete.

Mingo County, West Virginia, signed a Section 221 Agreement on 2 March 1983, agreeing to operate and maintain features of the project within its jurisdiction. The City of Williamson and Mingo County have agreed to enter into a sub-agreement transferring certain responsibilities to the City.

STATUS OF LOCAL COOPERATION (Continued):

Pike County, Kentucky, signed a Section 221 Agreement on 1 August 1983, agreeing to act as non-Federal sponsor for features of the project within its jurisdiction.

A Project Cooperation Agreement for the Lower Mingo County, West Virginia, element was executed on 17 November 1992 with the Mingo County Commission, based on the Assistant Secretary of the Army for Civil Works' approval of the Specific Project Report and the non-Federal sponsor's financing plan for the required cash contribution.

A Project Cooperation Agreement for the Pike County, Kentucky element was executed on 14 October 1994 with the Pike County Fiscal Court, based on the Assistant Secretary of the Army for Civil Works' approval of the Detailed Project Report and the non-Federal sponsor's financing plan for the required cash contribution.

A Project Cooperation Agreement for the Upper Mingo County, West Virginia element is scheduled for execution with the Mingo County, West Virginia Commission in June, 1995.

A Project Cooperation Agreement for the Grundy, Virginia element is scheduled for execution with the Virginia Department of Transportation and the Town of Grundy, Virginia in September, 1995.

A Project Cooperation Agreement for the Williamsburg, Kentucky element is scheduled for execution with the City of Williamsburg, Kentucky in March, 1995.

A Project Cooperation Agreement for the Middlesborough, Kentucky element is scheduled for execution with the City of Middlesborough, Kentucky in June, 1995.

COMPARISON OF FEDERAL COST ESTIMATES: The current Federal cost estimate of $1,441,600,000 is a increase of $427,500,000 from the latest estimate ($1,014,100,000) presented to Congress (FY 1995). This change includes the following items.

Item	Amount
Price Escalation on Construction Features	$ 7,609,000
Authorized Modifications	538,980,000
Post Contract Award and Other Estimating Adjustments (including contingency adjustments)	-119,989,600
Price Escalation on Real Estate	900,600
Total	$ 427,500,000

STATUS OF ENVIRONMENTAL IMPACT STATEMENT:

Tug Fork - The final Environmental Impact Statement (EIS) was filed with EPA on 3 December 1982.
Pineville - The final EIS was filed with EPA on 22 December 1982.
Barbourville - The Finding of No Significant Impact (FONSI) was signed on 1 February 1984.
Harlan - The final EIS was filed with EPA on 22 April 1988. The Record of Decision was signed on 8 August 1988.
Williamsburg - The FONSI was signed on 19 May 1994.
Specific Project Reports - EIS's for other areas will be scheduled as studies proceed.

OTHER INFORMATION: Funds to initiate construction were appropriated in FY 1981. The Urgent Supplemental Appropriations Act, 1984 (Public Law 98-332) provided $21,000,000 for nonstructural measures at this project.

The scheduled date of March, 1995 for completion of the Barbourville, Kentucky structural element is a slip from the latest completion date (December, 1994) presented to Congress (FY 1995) due to delays in delivery of the pumps.

Information on the Middlesborough element, both structural and nonstructural, is provided for the first time. The element was funded for construction by Congress in Fiscal Year 1995. A completion date of "Indefinite" has been established because the element is not included in the budget.

The Martin County, Kentucky Detailed Project Report has been combined with the Tributaries - Martin County Detailed Project Report because a single non-Federal sponsor would be involved in implementing recommended measures. The Tributaries - Martin County, Kentucky Detailed Project Report has been deleted.

The McDowell County, West Virginia Detailed Project Report scope has been expanded to include the Upper Tug Fork and Tributaries - McDowell County, West Virginia areas, because a single non-Federal sponsor would be involved in implementing recommended measures.

The Upper Tug Fork plus Welch, West Virginia and Tributaries - McDowell County Detailed Project Reports have been deleted.

The Tug Fork Tributaries Detailed Project Report has been deleted. The remaining tributary efforts have been transferred to separate Detailed Project Reports.

The scheduled completion date of September, 1995 for completion of the Clover Fork, Kentucky Detailed Project Report is a slip from the latest completion date (January, 1995) presented to Congress (FY 1995). This change is to expand the Detailed Project Report study to the required level of detail.

OTHER INFORMATION (Continued):

The scheduled completion date of September, 1996 for programmed work at the Barbourville, Kentucky nonstructural element is a change from the latest completion date (September, 1995) presented to Congress (FY 1995). This allows homeowners time to decide to participate in the nonstructural program.

Information on the Upper Mingo County, West Virginia nonstructural element is provided for the first time. The element was funded for construction by Congress in Fiscal Year 1995. A completion date of "Indefinite" has been established because the element is not included in the budget.

Information on the Levisa Basin, Virginia and Kentucky nonstructural element is included for the first time. A completion date of "Indefinite" has been established because the element is not included in the budget.

APPROPRIATION TITLE: Construction, General - Multiple Purpose Power

PROJECT: Barkley Dam and Lake Barkley, Kentucky and Tennessee (Continuing)

LOCATION: The completed dam site is located on the Cumberland River, 30.6 miles above the mouth, in Lyon and Livingston Counties, Kentucky, near Grand Rivers, Kentucky, and approximately 160 river-miles below Nashville, Tennessee. The remaining work is located on the Cumberland River between the towns of Dover and Cumberland City, Tennessee, River Mile 89.5 to 102.0.

DESCRIPTION: The completed work is a multiple purpose power project constructed during the period 1957-1969. The remaining work involves the Cross Creek National Wildlife Refuge, which stretches for 12.5 miles along either side of Lake Barkley sixty miles upstream of the dam. The Refuge was established in 1962 as mitigation for the loss of Kentucky Woodlands Refuge which was inundated by construction of the lake. The primary purpose of the Cross Creek National Wildlife Refuge is to provide feeding and resting habitat for migratory waterfowl. A system of dikes and water control structures makes it possible to regulate water levels to create wetlands habitat conducive to waterfowl management. Over the years shoreline failure has caused Refuge personnel to relocate access roads several times at some locations. In addition to providing maintenance access to the Refuge, the reservoir shoreline also serves in several areas as a natural levee separating the Lake Barkley from sub-impoundments of the Refuge. If bank failure were allowed to continue unchecked, water levels of the sub-impoundment would be unregulated and 4,100 acres of wetlands and bottomland hardwoods would be lost. The active failure zone includes bald eagle nesting habitat that continues to be lost as nesting trees fall into the lake. At the current rate of erosion, the loss of the Refuge is projected within two to three years.

AUTHORIZATION: Rivers and Harbors Act of 1954.

REMAINING BENEFIT-REMAINING COST RATIO: 1.4 to 1 at 8 percent.

TOTAL BENEFIT-COST RATIO: 1.4 to 1 at 8 percent (remaining work only).

INITIAL BENEFIT-COST RATIO: 1.8 to 1 at 2 1/2 percent (FY 1957).

BASIS OF BENEFIT-COST RATIO: Remaining benefits are from the latest available evaluation, dated April, 1993, at October, 1993 price levels.

SUMMARIZED FINANCIAL DATA		ACCUM. PCT. OF EST. FED. COST
Estimated Federal Cost	$ 157,298,644	
Estimated Non-Federal Cost	0	
Total Estimated Project Cost	$ 157,298,644	
Allocations to 30 September 1994	$ 146,498,644	
Conference Allowance for FY 1995	0	
Allocation for FY 1995	0	
Allocations through FY 1995	146,498,644	93
Allocation Requested for FY 1996	1,600,000	94
Programmed Balance to Complete after FY 1996	9,200,000	
Unprogrammed Balance to Complete after FY 1996	0	

STATUS (1 Jan 1995)	PERCENT COMPLETE	COMPLETION SCHEDULE
Remaining Work	0	Being Determined
Entire Project	93	Being Determined

PHYSICAL DATA

Completed Work

Dam - Concrete gravity and rolled earth fill
Spillway - Gate controlled, concrete ogee weir
Power Installation - 4 units @ 32,500 KW ea.
Reservoir Capacity - 2,082,000 acre-feet
Lock - 110′ by 800′ chamber; 57 foot lift
Canal - 1.5 miles long and 400 foot wide (bottom)

Remaining Work

15 of 25 miles of refuge shoreline will require shoreline treatment consisting of dumped quarry-run stone averaging 94 pounds. Dumped stone will have a two-foot bench at the top of the bank elevation. A non-woven geotextile material will be placed between the stone and existing ground. The other 10 miles of shoreline will be protected by vegetative treatment.

JUSTIFICATION: Chronic erosion is threatening the integrity of the Cross Creek National Wildlife Refuge, which is the mitigation component for the Lake Barkley Project. Continued shoreline erosion problems will result in the loss of the mitigation component at the Lake Barkley Project. Unless the shoreline is treated prior to failure, the ultimate cost to maintain this project feature will be much higher (in excess of $15,000,000) and damage to wildlife habitat will occur. The recommended plan of quarry-run stone placement and vegetative treatment is technically feasible, environmentally acceptable, and economically justifiable.

Division: Ohio River District: Nashville Barkley Dam and Lake Barkley, KY & TN

FISCAL YEAR 1996: The amount requested will be applied as follows:

Initiate Contract for Restoration Work	$ 674,000
Initiate Cultural Resources Preservation	100,000
Engineering and Design	716,000
Construction Management	110,000
Total	$1,600,000

NON-FEDERAL COSTS: None. The project is fully Federal.

STATUS OF LOCAL COOPERATION: Not Applicable.

COMPARISON OF FEDERAL COST ESTIMATES: The current Federal cost estimate of $157,298,644 is an increase of $10,800,000 over funds previously allocated ($146,498,644). This change includes the following item.

Item	Amount
Design Changes	$10,800,000
Total	$10,800,000

STATUS OF ENVIRONMENTAL IMPACT STATEMENT: The remaining work is covered by an Environmental Assessment, as required by the National Environmental Policy Act. The Reconnaissance Report and the Environmental Assessment were approved in October, 1993. Also, since a portion of the work would occur below ordinary high water, Section 404 of the Clean Water Act is applicable.

OTHER INFORMATION: Funds to initiate preconstruction engineering and design were appropriated in FY 1957, and funds to initiate construction were appropriated in FY 1959. Engineering and design for the remaining work was funded from the Operations and Maintenance, General appropriation in FY's 1991 through 1993. The Project Management Plan was approved in July, 1993.

APPROPRIATION TITLE: Construction, General - Dam Safety Assurance (Flood Control)

PROJECT: Dewey Lake, Kentucky (Dam Safety Assurance, Continuing)

LOCATION: The project is located in Floyd County, Kentucky, on Johns Creek of Levisa Fork, a tributary of the Big Sandy River, 79.4 miles above the mouth of the Big Sandy River

DESCRIPTION: The dam safety assurance project for Dewey Lake involves raising the effective height of the dam and dike by constructing a 3.0-ft. parapet wall; adding a 125-foot wide auxiliary spillway; and restricting the existing spillway to its original design capacity by providing vertical restriction walls on each side.

AUTHORIZATION: Flood Control Act of 1938, Public Law 75-761 (existing project).

REMAINING BENEFIT-REMAINING COST RATIO: Not Applicable.

TOTAL BENEFIT-COST RATIO: Not Applicable.

INITIAL BENEFIT-COST RATIO: Not Applicable.

BASIS OF BENEFIT-COST RATIO: Not Applicable.

SUMMARIZED FINANCIAL DATA

Original Project	
Actual Federal Cost	$ 7,845,547
Actual Non-Federal Cost	0
Total Actual Original Project Cost	$ 7,845,547

SUMMARIZED FINANCIAL DATA (Continued)		ACCUM PCT. OF EST. FED. COST
Project Modification		
Estimated Federal Cost	$19,600,000	
Estimated Non-Federal Cost	0	
Total Estimated Project Cost	$19,600,000	
Allocations to 30 September 1994	$ 105,000 1/	
Conference Allowance for FY 1995	0	
Allocation for FY 1995	495,000 1/	
Allocations through FY 1995	600,000 1/	4
Allocation Requested for FY 1996	1,400,000	11
Programmed Balance to Complete after FY 1996	17,600,000	
Unprogrammed Balance to Complete after FY 1996	0	

STATUS (1 Jan 1995)	PERCENT COMPLETE	COMPLETION SCHEDULE
Project Modification	0	Being Determined

PHYSICAL DATA

Increase elevation by constructing a 3 foot concrete parapet wall on the top of the dam and Brandykeg Dike and add an auxiliary spillway with a crest elevation of 688.0 and provide vertical restriction walls on the existing spillway to restrict discharge to design capacity.

1/ Reflects $600,000 programmed to the project from appropriations available for miscellaneous dam safety projects.

JUSTIFICATION: Spillway capacities at Dewey Lake are inadequate according to current engineering criteria. Of particular concern in reevaluation of design floods has been the ability of the dam to resist failure when overtopped. Hydrology and hydraulic studies show that failure of the 118-foot high Dewey Lake Dam could result in a major catastrophe. The project was completed in 1949 and is constructed of rolled earth fill with a central impervious core. It has a maximum crest length of 913 feet and would be overtopped by approximately 1.1 feet during the revised spillway flood based on current criteria. The duration of overtopping for this condition would be about 16 hours. Consequently, the risk of dam failure under this overtopping condition is extremely high.

FISCAL YEAR 1996: The requested funds will be applied as follows

Land & Damages	$ 60,000
Engineering and Design	1,240,000
Construction Management	100,000
Total	$1,400,000

NON-FEDERAL COSTS: None. This a fully Federal project

STATUS OF LOCAL COOPERATION: Not applicable

COMPARISON OF FEDERAL COST ESTIMATES: The current Federal cost estimate of $19,600,000 for the dam safety assurance modification is the first estimate presented to Congress

STATUS OF ENVIRONMENTAL IMPACT STATEMENT An Environmental Assessment was included in the Dewey Lake, Kentucky Spillway Deficiency Report for the Dam Safety Assurance Program A separate Environmental Assessment is expected to result in a Finding of No Significant Impacts signed by the District Commander

OTHER INFORMATION: The Dewey Lake, Kentucky Spillway Deficiency Report for the Dam Safety Assurance Program was approved by the Assistant Secretary of the Army for Civil Works on 23 June 1994.

Initial funds for engineering and design were programmed to the project in FY 1994 from appropriations available for miscellaneous dam safety projects.

APPROPRIATION TITLE: Construction, General - Dam Safety Assurance (Multiple Purpose Power)

PROJECT: Center Hill Dam, Tennessee (Dam Safety Assurance, Continuing)

LOCATION: The existing project is located on the Caney Fork, 26.6 miles above its confluence with the Cumberland River. The site is located in DeKalb County, Tennessee, 55 miles east of Nashville, 19 miles southwest of Cookeville, and 14 miles southeast of Carthage.

DESCRIPTION: The dam safety assurance modification to Center Hill Dam consists of remedial work on the main dam and increasing the project's spillway capacity through an existing saddle dam located just upstream on the right bank of the reservoir. The project modification involves securing six monoliths with tension anchors to allow the maximum allowable reservoir elevation to be raised 1.4 feet. Additional spillway capacity will be achieved by cutting a 600-foot wide by 38-foot deep weir into the existing 800-foot wide earthen saddle dam. The weir will be lined with concrete to protect the remaining portion of the saddle dam. An erodible fuse plug embankment will be constructed in the weir to maintain the reservoir until elevation 692.4 is reached. This design allows normal operation of the project up to a 75 percent probable maximum flood (PMF). For floods greater than this, the fuse plug will overtop and erode. This action will leave a weir in the saddle dam capable of protecting the dam to the PMF level. All work is programmed.

AUTHORIZATION: Flood Control Act of 1938 (existing project).

REMAINING BENEFIT-REMAINING COST RATIO: Not Applicable.

TOTAL BENEFIT-COST RATIO: Not Applicable.

INITIAL BENEFIT-COST RATIO: Not Applicable.

BASIS OF BENEFIT-COST RATIO: Not Applicable.

SUMMARIZED FINANCIAL DATA

Original Project	
Actual Federal Cost	$44,287,484
Actual Non-Federal Cost	0
Total Actual Original Project Cost	$44,287,484

SUMMARIZED FINANCIAL DATA (Continued)				ACCUM. PCT. OF EST. FED. COST
Project Modification				
Estimated Federal Cost (Ultimate)			$12,700,000	
Estimated Non-Federal Reimbursement			1,100,000	
Cash Contributions		$ 0		
Other Costs		0		
Reimbursements		1,100,000		
Power	$ 1,100,000			
Total Estimated Project Cost			$13,800,000	
Allocations to 30 September 1994			$ 7,930,000	
Conference Allowance for FY 1995			5,900,000	
Allocation for FY 1995			4,966,000 1/	
Allocations through FY 1995			12,896,000	93
Allocation Requested for FY 1996			904,000	100
Programmed Balance to Complete after FY 1996			0	
Unprogrammed Balance to Complete after FY 1996			0	

STATUS (1 Jan 1995)	PERCENT COMPLETE	COMPLETION SCHEDULE
Project Modification	44	Sep 1996

PHYSICAL DATA

Completed Project:
- Spillway - 470 feet, 8 gates
- Main Dam - 240 feet high, 2160 feet crest length
- Saddle Dam - 125 feet high, 775 feet crest length
- Power Plant Capacity - 135,000 KW
- Reservoir - 23,060 acres, storage capacity 2,092,000 acre-feet

Remaining Work:
- Secure six monoliths with tension anchors to raise reservoir elevation 1.4 feet.
- Construct 600-foot wide by 38-foot deep weir in the saddle dam with an erodible fuse plug embankment.

1/ Reflects a $934,000 reduction assigned as savings and slippage and $1,950,000 in programmed carryover into FY 1996.

JUSTIFICATION: Sudden failure of Center Hill Dam would result in catastrophic flooding on the Caney Fork and Cumberland Rivers with a significant amount of property damage and a high potential for loss of life. Approximately 11,000 people downstream of the dam are directly affected by the failure condition. Analysis shows that a failure at Center Hill could result in the overtopping failure of Old Hickory Dam, located on the Cumberland River 119.6 miles downstream of Center Hill. The economic consequences associated with a failure are calculated to be over $557 million. The correction of the hydrologic deficiency at Center Hill Dam will modify the existing project to accommodate the PMF.

FISCAL YEAR 1996: The total program amount, including the requested and programmed carryover amounts of $904,000 and $1,950,000, respectively, will be applied as follows:

Complete Contract for Remedial Work	$2,452,000
Complete Lands and Damages	21,000
Engineering and Design	38,000
Construction Management	343,000
Total	$2,854,000

NON-FEDERAL COSTS: Future non-Federal reimbursement is from the sale of power.

STATUS OF LOCAL COOPERATION: Not Applicable.

COMPARISON OF FEDERAL COST ESTIMATES: The current Federal cost estimate of $13,800,000 is a decrease of $2,900,000 from the latest estimate ($16,700,000) presented to Congress (FY 1995). This change includes the following item.

Item	Amount
Post Contract Award and Other Estimating Adjustments (including contingency adjustments)	$-2,900,000
Total	$-2,900,000

STATUS OF ENVIRONMENTAL IMPACT STATEMENT: This proposed action is categorically excluded from National Environmental Policy Act (NEPA) documentation under 33 CFR 230.9(b), Activities at Completed Corps Projects which Carry Out Authorized Project Purposes." Also, since the work would occur above ordinary high water, Section 404 of the Clean Water Act is not applicable. An Environmental Assessment of the spillway area was completed and the Finding of No Significant Impacts was signed on 9 September 1991.

OTHER INFORMATION: Approval to initiate preparation of the Design Memorandum was received in October, 1990. Funds to initiate the project modification were reprogrammed to the project in FY 1991. The scheduled completion date of September, 1996 is unchanged from the latest date (September, 1996) presented to Congress (FY 1995).

OHIO RIVER DIVISION
JUSTIFICATION OF ESTIMATE

APPROPRIATION TITLE: Operation and Maintenance, General, FY 1996

1. **Navigation**

a. Channels and Harbors

The program request of $1,143,000 provides for the operational requirements of 4 projects Requirements include: dredging, engineering and design and maintenance supervision and administration on spurs or side channels.

State/ Project Name	**ESTIMATED OBLIGATIONS ($)** FY 1995 Total (Operations) (Maintenance)	FY 1996 Total (Operations) (Maintenance)	Reason For Change And Major Maintenance Items 1. Footnote 1/ 2. Footnote 2/
Kentucky			
Big Sandy Harbor	$1,035,000	$1,035,000	
	(35,000)	(35,000)	1. None.
	(1,000,000)	(1,000,000)	2. Perform dredging to maintain navigation channel.
Licking River	22,000	30,000	
	(0)	(0)	1. None.
	(22,000)	(30,000)	2. None.

1/ Reasons for change in Operations from FY 1995 to FY 1996 (10% +/-).
2/ Major Maintenance Items Budgeted in FY 1996 (Threshold $500,000).

OHIO RIVER DIVISION
JUSTIFICATION OF ESTIMATE

APPROPRIATION TITLE: Operation and Maintenance, General, FY 1996

1. **Navigation** (continued)

a. Channels and Harbors (continued)

State/ Project Name	**ESTIMATED OBLIGATIONS ($)** FY 1995 Total (Operations) (Maintenance)	FY 1996 Total (Operations) (Maintenance)	Reason For Change And Major Maintenance Items
Ohio			
Portsmouth Harbor	$0	$75,000	
	(0)	(0)	1. None.
	(0)	(75,000)	2. None.
West Virginia			
Elk River Harbor	323,000	3,000	
	(23,000)	(3,000)	1. **Perform additional channel condition surveys in FY 95.**
	(300,000)	(0)	2. None.
TOTAL, Channels and Harbors	$1,380,000	$1,143,000	
	(58,000)	(38,000)	
	(1,322,000)	(1,105,000)	

OHIO RIVER DIVISION
JUSTIFICATION OF ESTIMATE

APPROPRIATION TITLE: Operation and Maintenance, General, FY 1996

1. **Navigation** (continued)

b. Locks and Dams

The program request of $117,980,000 provides for the operational requirements of 9 projects. Requirements include: operation and ordinary maintenance of project facilities; labor, supplies and parts for day-to-day functioning; periodic maintenance, repairs and replacements; and contract law enforcement.

State/ Project Name	**ESTIMATED OBLIGATIONS ($)** FY 1995 Total (Operations) (Maintenance)	FY 1996 Total (Operations) (Maintenance)	Reason For Change And Major Maintenance Items
Kentucky			
Green and Barren Rivers	$1,447,000 (1,202,000) (245,000)	$1,378,000 (1,268,000) (110,000)	1. None. 2. None.
Kentucky River	1,045,000 (875,000) (170,000)	1,059,000 (947,000) (112,000)	1. None. 2. None.
Ohio River Locks and Dams	55,769,000 (26,589,000) (29,180,000)	53,568,000 (26,886,000) (26,682,000)	1. None. 2. Paint tainter gates and bulkheads at Belleville, Racine and Meldahl Locks and Dams; dewater locks and repair culvert valves at Bellevile and Willow Island Locks and Dams; repair miter gates at Greenup and Racine Locks and Dams.

(continued on following page)

OHIO RIVER DIVISION
JUSTIFICATION OF ESTIMATE

APPROPRIATION TITLE: Operation and Maintenance, General, FY 1996

1. **Navigation** (continued)

   b. Locks and Dams (continued)

State/ Project Name	ESTIMATED OBLIGATIONS ($) FY 1995 Total (Operations) (Maintenance)	FY 1996 Total (Operations) (Maintenance)	Reason For Change And Major Maintenance Items
Kentucky (continued) Ohio River Locks and Dams (continued)			2. Repair tainter gates and gate anchorages at Cannelton Locks and Dam; dewater locks at Uniontown and Newburgh Locks and Dams; repair dam gate at Newburgh Locks and Dam. Repair lock gates and valves at Dashields Locks and Dam; replace crane at New Cumberland Locks and Dam; repair dam lift gate at Emsworth Locks and Dam. Install safety zone signs at dams.
Ohio River Open Channel Work	$6,287,000 (1,287,000) (5,000,000)	$6,025,000 (1,321,000) (4,704,000)	1. None. 2. Perform clearing and snagging of channel; perform navigation channel dredging.

OHIO RIVER DIVISION
JUSTIFICATION OF ESTIMATE

APPROPRIATION TITLE: Operation and Maintenance, General, FY 1996

1. **Navigation** (continued)

   b. Locks and Dams (continued)

State/ Project Name	ESTIMATED OBLIGATIONS ($) FY 1995 Total (Operations) (Maintenance)	FY 1996 Total (Operations) (Maintenance)	Reason For Change And Major Maintenance Items
Pennsylvania			
Allegheny River	$12,244,000	$12,736,000	
	(4,415,000)	(3,591,000)	1. Conduct periodic inspection and reporting; replace dam marker buoys; update master plan; update flood stage data in FY 95.
	(7,829,000)	(9,145,000)	2. Repair electrical and mechanical equipment and make concrete repairs on lock walls at Locks and Dam 4; repair scouring around dam at Locks and Dam 2; repair lock gates at Locks and Dam 4; perform dredging at lock approaches; install safety zone signs at dams.
Monongahela River	13,337,000	16,586,000	
	(8,070,000)	(6,675,000)	1. Perform channel condition surveys for dredging; update master plan; update navigation charts in FY 95.
	(5,267,000)	(9,911,000)	2. Paint tainter gates and bulkheads at Locks and Dam 4; renovate dam electrical system at Point Marion Locks and Dam; make repairs to miter gates, anchorages, and valves at Locks and Dam 4 and Maxwell Locks and Dam; install safety zone signs at dams for Locks and Dams 2, 3 and 4.

OHIO RIVER DIVISION
JUSTIFICATION OF ESTIMATE

APPROPRIATION TITLE: Operation and Maintenance, General, FY 1996

1. **Navigation** (continued)

    b. Locks and Dams (continued)

State/ Project Name	ESTIMATED OBLIGATIONS ($) FY 1995 Total (Operations) (Maintenance)	ESTIMATED OBLIGATIONS ($) FY 1996 Total (Operations) (Maintenance)	Reason For Change And Major Maintenance Items
Tennessee			
Tennessee River	$12,705,000 (4,448,000) (8,257,000)	$13,637,000 (4,669,000) (8,968,000)	1. None. 2. Replace culvert valves at Chickamauga Lock; make electrical repairs at Kentucky Lock; paint lock machinery at Chickamauga, Guntersville and Kentucky Locks, and Wilson Main and Auxiliary Locks; dewater and repair gates and valves at Wilson Main and Melton Hill Locks.
West Virginia			
Charleston Riverfront Park	269,000 (0) (269,000)	0 (0) (0)	1. None. 2. None.
Kanawha River	10,861,000 (5,016,000) (5,845,000)	11,376,000 (5,030,000) (6,346,000)	1. None. 2. Paint roller gates and bulkheads at London Locks and Dam; repair seals at Marmet Locks and Dam; install culvert gate operating machinery at Winfield Locks and Dam; perform channel maintenance dredging.

OHIO RIVER DIVISION
JUSTIFICATION OF ESTIMATE

APPROPRIATION TITLE: Operation and Maintenance, General, FY 1996

1. **Navigation** (continued)

   b. Locks and Dams (continued)

State/ Project Name	ESTIMATED OBLIGATIONS ($) FY 1995 Total (Operations) (Maintenance)	 FY 1996 Total (Operations) (Maintenance)	Reason For Change And Major Maintenance Items
West Virginia (continued)			
Tygart Lake	$1,411,000 (856,000) (555,000)	$1,615,000 (1,091,000) (524,000)	1. Conduct dam safety assurance studies in FY 96. 2. None.
TOTAL, Locks and Dams	$115,375,000 (52,758,000) (62,617,000)	$117,980,000 (51,478,000) (66,502,000)	
TOTAL--NAVIGATION	$116,755,000 (52,816,000) (63,939,000)	$119,123,000 (51,516,000) (67,607,000)	

OHIO RIVER DIVISION
JUSTIFICATION OF ESTIMATE

APPROPRIATION TITLE: Operation and Maintenance, General, FY 1996

2. **Flood Control**

a. Reservoirs

The program request of $73,776,000 provides for the operational requirements of 71 flood control projects. Requirements include: operation and ordinary maintenance of project facilities; labor, supplies, materials, and parts for day-to-day functioning; periodic maintenance, repairs, and replacements; and contract law enforcement. The requested amount also includes application of special recreation use fees for recreation areas.

State/ Project Name	**ESTIMATED OBLIGATIONS ($)** FY 1995 Total (Operations) (Maintenance)	FY 1996 Total (Operations) (Maintenance)	Reason For Change And Major Maintenance Items
Indiana			
Brookville Lake	$556,000	$711,000	
	(502,000)	(650,000)	1. Analyze water quality data and conduct water quality study in FY 96.
	(54,000)	(61,000)	2. None.
Cagles Mill Lake	635,000	625,000	
	(539,000)	(618,000)	1. Conduct periodic inspection; evaluate water quality data in FY 96.
	(96,000)	(7,000)	2. None.
Cecil M. Harden Lake	1,037,000	762,000	
	(571,000)	(698,000)	1. Conduct periodic inspection; conduct dam safety training in FY 96.
	(466,000)	(64,000)	2. None.

OHIO RIVER DIVISION
JUSTIFICATION OF ESTIMATE

APPROPRIATION TITLE: Operation and Maintenance, General, FY 1996

2. **Flood Control** (continued)

a. Reservoirs (continued)

State/ Project Name	ESTIMATED OBLIGATIONS ($) FY 1995 Total (Operations) (Maintenance)	 FY 1996 Total (Operations) (Maintenance)	Reason For Change And Major Maintenance Items
Indiana (continued)			
Huntington Lake	$569,000	$643,000	
	(500,000)	(609,000)	1 Perform real estate compliance inspections; evaluate water quality data; update master plan in FY 96.
	(69,000)	(34,000)	2. None
Mississinewa Lake	561,000	1,073,000	
	(527,000)	(986,000)	1. Update master plan; perform structural analysis and evaluation of dam foundation in FY 96.
	(34,000)	(87,000)	2. None.
Monroe Lake	636,000	680,000	
	(634,000)	(617,000)	1. None.
	(2,000)	(63,000)	2. None.
Patoka Lake	506,000	790,000	
	(506,000)	(747,000)	1. Collect water quality data; perform real estate compliance inspections in FY 96.
	(0)	(43,000)	2. None.
Salamonie Lake	608,000	807,000	
	(556,000)	(663,000)	1. Perform real estate compliance inspections; prepare historic preservation management plan in FY 96.
	(52,000)	(144,000)	2. None.

OHIO RIVER DIVISION
JUSTIFICATION OF ESTIMATE

APPROPRIATION TITLE: Operation and Maintenance, General, FY 1996

2. **Flood Control** (continued)

a. Reservoirs (continued)

State/ Project Name	ESTIMATED OBLIGATIONS ($) FY 1995 Total (Operations) (Maintenance)	FY 1996 Total (Operations) (Maintenance)	Reason For Change And Major Maintenance Items
Kentucky			
Barren River Lake	$1,517,000	$1,898,000	
	(1,372,000)	(1,750,000)	1. Update and analyze hydraulic data; conduct water quality analysis and studies in FY 96.
	(145,000)	(148,000)	2 None.
Buckhorn Lake	1,054,000	1,272,000	
	(807,000)	(975,000)	1. Evaluate water quality data; update and analyze hydraulic data in FY 96.
	(247,000)	(297,000)	2. None.
Carr Fork Lake	1,330,000	1,593,000	
	(1,068,000)	(1,332,000)	1. Evaluate water quality data; collect and analyze hydraulic data in FY 96.
	(262,000)	(261,000)	2. None.
Cave Run Lake	716,000	979,000	
	(595,000)	(823,000)	1. Analyze water quality data and conduct water quality model study in FY 96.
	(121,000)	(156,000)	2 None.

OHIO RIVER DIVISION
JUSTIFICATION OF ESTIMATE

APPROPRIATION TITLE: Operation and Maintenance, General, FY 1996

2. **Flood Control** (continued)

a. Reservoirs (continued)

State/ Project Name	ESTIMATED OBLIGATIONS ($) FY 1995 Total (Operations) (Maintenance)	FY 1996 Total (Operations) (Maintenance)	Reason For Change And Major Maintenance Items
Kentucky (continued)			
Dewey Lake	$1,093,000	$1,092,000	
	(952,000)	(1,067,000)	1 Conduct periodic inspection and reporting; prepare drought contingency plan in FY 96.
	(141,000)	(25,000)	2 None
Fishtrap Lake	1,151,000	1,607,000	
	(1,100,000)	(1,600,000)	1 Prepare embankment stability analysis and dam safety seismic study; perform cultural resources survey; conduct periodic inspection and reporting; prepare drought contingency plan in FY 96.
	(51,000)	(7,000)	2 None.
Grayson Lake	822,000	986,000	
	(806,000)	(939,000)	1 Prepare drought contingency plan; perform cultural resources survey; prepare master plan supplement; conduct periodic inspection and reporting in FY 96.
	(16,000)	(47,000)	2. None.
Green River Lake	1,546,000	1,904,000	
	(1,286,000)	(1,517,000)	1 Update master plan in FY 96.
	(260,000)	(387,000)	2. None.

OHIO RIVER DIVISION
JUSTIFICATION OF ESTIMATE

APPROPRIATION TITLE: Operation and Maintenance, General, FY 1996

2. **Flood Control** (continued)

a. Reservoirs (continued)

State/ Project Name	ESTIMATED OBLIGATIONS ($) FY 1995 Total (Operations) (Maintenance)	FY 1996 Total (Operations) (Maintenance)	Reason For Change And Major Maintenance Items
Kentucky (continued)			
Martins Fork Lake	$764,000	$649,000	
	(561,000)	(580,000)	1 None
	(203,000)	(69,000)	2 None
Nolin Lake	1,722,000	1,956,000	
	(1,474,000)	(1,687,000)	1 Collect water quality data; analyze water control data in FY 96.
	(248,000)	(269,000)	2 None
Paintsville Lake	776,000	940,000	
	(682,000)	(813,000)	1 Conduct periodic inspection and reporting; prepare drought contingency plan in FY 96.
	(94,000)	(127,000)	2 None
Rough River Lake	1,561,000	1,780,000	
	(1,373,000)	(1,503,000)	1. None.
	(188,000)	(277,000)	2 None
Taylorsville Lake	1,450,000	963,000	
	(661,000)	(963,000)	1 Perform real estate compliance inspections; collect and analyze water quality data in FY 96.
	(789,000)	(0)	2 None

OHIO RIVER DIVISION
JUSTIFICATION OF ESTIMATE

APPROPRIATION TITLE: Operation and Maintenance, General, FY 1996

2. **Flood Control** (continued)

a. Reservoirs (continued)

State/ Project Name	ESTIMATED OBLIGATIONS ($) FY 1995 Total (Operations) (Maintenance)	ESTIMATED OBLIGATIONS ($) FY 1996 Total (Operations) (Maintenance)	Reason For Change And Major Maintenance Items
Kentucky (continued)			
Yatesville Lake	$897,000	$1,033,000	
	(742,000)	(997,000)	1. Conduct periodic inspection and reporting; prepare drought contingency plan and master plan supplement; perform cultural resources survey; operate visitors' center for first year in FY 96.
	(155,000)	(36,000)	2. None.
Ohio			
Alum Creek Lake	715,000	861,000	
	(543,000)	(598,000)	1. Conduct periodic inspection and reporting in FY 96.
	(172,000)	(263,000)	2. None.
Berlin Lake	1,974,000	1,907,000	
	(1,219,000)	(1,387,000)	1. Perform real estate compliance inspections in FY 96.
	(755,000)	(520,000)	2. None.
Caesar Creek Lake	1,058,000	1,186,000	
	(949,000)	(1,136,000)	1. Perform cultural resources survey; evaluate water quality data; perform real estate compliance inspections in FY 96.
	(109,000)	(50,000)	2. None.

OHIO RIVER DIVISION
JUSTIFICATION OF ESTIMATE

APPROPRIATION TITLE: Operation and Maintenance, General, FY 1996

2. **Flood Control** (continued)

a. Reservoirs (continued)

State/ Project Name	ESTIMATED OBLIGATIONS ($) FY 1995 Total (Operations) (Maintenance)	FY 1996 Total (Operations) (Maintenance)	Reason For Change And Major Maintenance Items
Ohio (continued)			
Clarence J. Brown Dam	$567,000	$722,000	
and Reservoir	(518,000)	(691,000)	1. Conduct periodic inspection; collect and analyze hydraulic data in FY 96.
	(49,000)	(31,000)	2. None.
Deer Creek Lake	1,806,000	620,000	
	(565,000)	(545,000)	1. None.
	(1,241,000)	(75,000)	2. None.
Delaware Lake	534,000	623,000	
	(513,000)	(579,000)	1. Conduct periodic inspection and reporting in FY 96.
	(21,000)	(44,000)	2. None.
Dillon Lake	513,000	914,000	
	(422,000)	(427,000)	1. None.
	(91,000)	(487,000)	2. None.
Michael J. Kirwan	913,000	922,000	
Dam and Reservoir	(777,000)	(836,000)	1. None.
	(136,000)	(86,000)	2. None.

OHIO RIVER DIVISION
JUSTIFICATION OF ESTIMATE

APPROPRIATION TITLE: Operation and Maintenance, General, FY 1996

2. **Flood Control** (continued)

a. Reservoirs (continued)

State/ Project Name	ESTIMATED OBLIGATIONS ($) FY 1995 Total (Operations) (Maintenance)	FY 1996 Total (Operations) (Maintenance)	Reason For Change And Major Maintenance Items
Ohio (continued)			
Mosquito Creek Lake	$740,000	$1,026,000	
	(616,000)	(817,000)	1. Perform sedimentation survey; conduct periodic inspection and reporting in FY 96.
	(124,000)	(209,000)	2. None.
Muskingum River Lakes	6,592,000	8,287,000	
	(4,645,000)	(6,870,000)	1. Prepare dam safety assurance studies; perform seepage stability studies and embankment stability studies; perform cultural resources surveys; conduct periodic inspections and reporting in FY 96.
	(1,947,000)	(1,417,000)	2. Grout abutments at Atwood Lake Dam.
North Branch of Kokosing River Lake	220,000	213,000	
	(220,000)	(211,000)	1. None.
	(0)	(2,000)	2. None.
Paint Creek Lake	616,000	521,000	
	(585,000)	(521,000)	1. Conduct periodic inspection and reporting; prepare drought contingency plan in FY 95.
	(31,000)	(0)	2. None.

OHIO RIVER DIVISION
JUSTIFICATION OF ESTIMATE

APPROPRIATION TITLE: Operation and Maintenance, General, FY 1996

2. **Flood Control** (continued)

a. Reservoirs (continued)

State/ Project Name	ESTIMATED OBLIGATIONS ($) FY 1995 Total (Operations) (Maintenance)	FY 1996 Total (Operations) (Maintenance)	Reason For Change And Major Maintenance Items
Ohio (continued)			
Tom Jenkins Dam	$283,000	$430,000	
	(275,000)	(424,000)	1. Perform analysis and evaluation of embankment stability in FY 96.
	(8,000)	(6,000)	2. None.
West Fork of Mill Creek Lake	431,000	609,000	
	(379,000)	(515,000)	1. Update and analyze hydraulic data in FY 96.
	(52,000)	(94,000)	2. None.
William H. Harsha Lake	717,000	850,000	
	(545,000)	(838,000)	1. Conduct periodic inspection; perform real estate compliance inspections; perform cultural resources survey in FY 96.
	(172,000)	(12,000)	2. None.
Pennsylvania			
Conemaugh River Lake	1,075,000	3,112,000	
	(827,000)	(965,000)	1. Conduct periodic inspection; collect and analyze water control data in FY 96.
	(248,000)	(2,147,000)	2. Perform dredging and debris removal in vicinity of dam.

OHIO RIVER DIVISION
JUSTIFICATION OF ESTIMATE

APPROPRIATION TITLE: Operation and Maintenance, General, FY 1996

2. **Flood Control** (continued)

a. Reservoirs (continued)

State/ Project Name	ESTIMATED OBLIGATIONS ($) FY 1995 Total (Operations) (Maintenance)	FY 1996 Total (Operations) (Maintenance)	Reason For Change And Major Maintenance Items
Pennsylvania (continued)			
Crooked Creek Lake	$1,553,000	$1,201,000	
	(939,000)	(1,054,000)	1. Perform real estate compliance inspections; perform boundary monumentation and rectification in FY 96.
	(614,000)	(147,000)	2. None
East Branch	1,058,000	1,036,000	
Clarion River	(780,000)	(851,000)	1. None.
	(278,000)	(185,000)	2. None
Kinzua Dam and	1,401,000	1,559,000	
Allegheny	(1,238,000)	(1,487,000)	1. Update master plan in FY 96.
Reservoir	(163,000)	(72,000)	2. None.
Loyalhanna Lake	940,000	1,155,000	
	(806,000)	(930,000)	1. Update master plan in FY 96.
	(134,000)	(225,000)	2. None.

OHIO RIVER DIVISION
JUSTIFICATION OF ESTIMATE

APPROPRIATION TITLE: Operation and Maintenance, General, FY 1996

2. **Flood Control** (continued)

a. Reservoirs (continued)

State/ Project Name	ESTIMATED OBLIGATIONS ($)		Reason For Change And Major Maintenance Items
	FY 1995 Total (Operations) (Maintenance)	FY 1996 Total (Operations) (Maintenance)	
Pennsylvania (continued)			
Mahoning Creek Lake	$993,000	$1,844,000	
	(751,000)	(852,000)	1. Update master plan in FY 96.
	(242,000)	(992,000)	2. Replace low flow gate valves.
Shenango River Lake	1,921,000	2,074,000	
	(1,700,000)	(1,964,000)	1. Perform sedimentation survey; conduct periodic inspection and reporting; perform real estate compliance inspections in FY 96.
	(221,000)	(110,000)	2. None.
Tionesta Lake	1,273,000	1,256,000	
	(892,000)	(1,195,000)	1. Perform sedimentation survey; update operation and maintenance manual in FY 96.
	(381,000)	(61,000)	2. None.
Union City Lake	422,000	296,000	
	(279,000)	(270,000)	1. None.
	(143,000)	(26,000)	2. None.

OHIO RIVER DIVISION
JUSTIFICATION OF ESTIMATE

APPROPRIATION TITLE: Operation and Maintenance, General, FY 1996

2. **Flood Control** (continued)

a. Reservoirs (continued)

State/ Project Name	ESTIMATED OBLIGATIONS ($) FY 1995 Total (Operations) (Maintenance)	 FY 1996 Total (Operations) (Maintenance)	Reason For Change And Major Maintenance Items
Pennsylvania (continued)			
Woodcock Creek Lake	$841,000 (698,000) (143,000)	$1,242,000 (851,000) (391,000)	1. Update master plan in FY 96. 2. None.
Youghiogheny River Lake	1,836,000 (1,613,000) (223,000)	1,833,000 (1,685,000) (148,000)	1. None. 2. None.
Virginia			
John W. Flannagan Dam and Reservoir	1,337,000 (1,291,000) (46,000)	1,551,000 (1,526,000) (25,000)	1. Conduct periodic inspection and reporting; perform embankment stability analysis; conduct dam emergency operations training in FY 96. 2. None.
North Fork of Pound River Lake	379,000 (324,000) (55,000)	351,000 (331,000) (20,000)	1. None. 2. None.

OHIO RIVER DIVISION
JUSTIFICATION OF ESTIMATE

APPROPRIATION TITLE: Operation and Maintenance, General, FY 1996

2. **Flood Control** (continued)

a. Reservoirs (continued)

State/ Project Name	ESTIMATED OBLIGATIONS ($) FY 1995 Total (Operations) (Maintenance)	ESTIMATED OBLIGATIONS ($) FY 1996 Total (Operations) (Maintenance)	Reason For Change And Major Maintenance Items
West Virginia			
Beech Fork Lake	$775,000	$956,000	
	(719,000)	(916,000)	1. Conduct periodic inspection; analyze water quality data in FY 96.
	(56,000)	(40,000)	2. None.
Bluestone Lake	3,502,000	1,741,000	
	(989,000)	(1,004,000)	1. None.
	(2,513,000)	(737,000)	2. Remove and dispose of drift and debris at dam.
Burnsville Lake	1,166,000	1,187,000	
	(1,110,000)	(1,155,000)	1. None.
	(56,000)	(32,000)	2. None.
East Lynn Lake	1,132,000	1,296,000	
	(941,000)	(1,294,000)	1. Conduct periodic inspection and reporting; conduct dam emergency operations training in FY 96.
	(191,000)	(2,000)	2. None.
R. D. Bailey Lake	1,130,000	1,632,000	
	(1,078,000)	(1,379,000)	1. Conduct periodic inspection and reporting; prepare drought contingency plan in FY 96.
	(52,000)	(253,000)	2. None.

OHIO RIVER DIVISION
JUSTIFICATION OF ESTIMATE

APPROPRIATION TITLE: Operation and Maintenance, General, FY 1996

2. **Flood Control** (continued)

a. Reservoirs (continued)

State/ Project Name	ESTIMATED OBLIGATIONS ($) FY 1995 Total (Operations) (Maintenance)	FY 1996 Total (Operations) (Maintenance)	Reason For Change And Major Maintenance Items
West Virginia (continued)			
Stonewall Jackson Lake	$942,000 (877,000) (65,000)	$957,000 (890,000) (67,000)	1. None 2 None.
Summersville Lake	1,279,000 (1,128,000) (151,000)	1,310,000 (1,310,000) (0)	1. Analyze flood frequency data; prepare environmental assessment for water control management in FY 96. 2 None.
Sutton Lake	1,623,000 (1,417,000) (206,000)	1,753,000 (1,441,000) (312,000)	1. None. 2. None.
TOTAL, Reservoirs	$65,764,000 (50,982,000) (14,782,000)	$73,776,000 (61,879,000) (11,897,000)	

OHIO RIVER DIVISION
JUSTIFICATION OF ESTIMATE

APPROPRIATION TITLE: Operation and Maintenance, General, FY 1996

2. **Flood Control** (continued)

b. Channel Improvements, Inspection and Miscellaneous Maintenance

The program request of $1,897,000 provides for the annual and periodic maintenance requirements of 6 local protection projects and the inspection of 140 completed works during the budget year.

State/ Project Name	ESTIMATED OBLIGATIONS ($)		Reason For Change And Major Maintenance Items
	FY 1995 Total (Operations) (Maintenance)	FY 1996 Total (Operations) (Maintenance)	
Kentucky			
Middlesboro	$38,000	$65,000	
	(38,000)	(65,000)	1. Conduct sedimentation survey and analyze channel flow capacity in FY 96.
	(0)	(0)	2. None.
Ohio			
Massillon	25,000	25,000	
	(0)	(0)	1. None.
	(25,000)	(25,000)	2. None.
Roseville	30,000	30,000	
	(0)	(0)	1. None.
	(30,000)	(30,000)	2. None.

OHIO RIVER DIVISION
JUSTIFICATION OF ESTIMATE

APPROPRIATION TITLE: Operation and Maintenance, General, FY 1996

2. **Flood Control** (continued)

b. Channel Improvements, Inspection and Miscellaneous Maintenance (continued)

State/ Project Name	ESTIMATED OBLIGATIONS ($) FY 1995 Total (Operations) (Maintenance)	 FY 1996 Total (Operations) (Maintenance)	Reason For Change And Major Maintenance Items
Pennsylvania			
Johnstown	$1,877,000	$1,243,000	
	(8,000)	(10,000)	1. Perform real estate compliance inspections in FY 96.
	(1,869,000)	(1,233,000)	2. Continue engineering and design for major maintenance work.
Punxsutawney	200,000	37,000	
	(8,000)	(37,000)	1. Perform sedimentation survey in FY 96.
	(192,000)	(0)	2. None.
West Virginia			
Elkins	7,000	10,000	
	(7,000)	(10,000)	1. Remove vegetation damaging dike in FY 96.
	(0)	(0)	2. None.

OHIO RIVER DIVISION
JUSTIFICATION OF ESTIMATE

APPROPRIATION TITLE: Operation and Maintenance, General, FY 1996

2. **Flood Control** (continued)

b. Channel Improvements, Inspection and Miscellaneous Maintenance (continued)

State/ Project Name	ESTIMATED OBLIGATIONS ($) FY 1995 Total (Operations) (Maintenance)	 FY 1996 Total (Operations) (Maintenance)	Reason For Change And Major Maintenance Items
Inspection of Completed Works	$429,000 (429,000) (0)	$487,000 (487,000) (0)	1. Additional number of inspections in FY 96. 2. None.
TOTAL, Channel Improvements, Inspection & Miscellaneous Maintenance	$2,606,000 (490,000) (2,116,000)	$1,897,000 (609,000) (1,288,000)	
TOTAL--FLOOD CONTROL	$68,370,000 (51,472,000) (16,898,000)	$75,673,000 (62,488,000) (13,185,000)	

OHIO RIVER DIVISION
JUSTIFICATION OF ESTIMATE

APPROPRIATION TITLE: Operation and Maintenance, General, FY 1996

3. **Multiple Purpose Power**

The program request of $45,886,000 provides for the operational requirements of 9 multiple purpose projects. Requirements include: operation and ordinary maintenance of project facilities; labor, supplies, materials, and parts for day-to-day functioning; periodic maintenance, repairs, and replacements; and contract law enforcement. The requested amount also includes application of special recreation use fees for recreation areas.

State/ Project Name	**ESTIMATED OBLIGATIONS ($)** FY 1995 Total (Operations) (Maintenance)	FY 1996 Total (Operations) (Maintenance)	Reason For Change And Major Maintenance Items
Kentucky			
Barkley Dam--Lake Barkley	$8,224,000	$7,026,000	
	(3,472,000)	(3,825,000)	1. Conduct periodic inspection; perform real estate compliance inspections in FY 96.
	(4,752,000)	(3,201,000)	2. Repair gate monoliths at lock.
Laurel River Lake	1,504,000	1,261,000	
	(649,000)	(692,000)	1. None.
	(855,000)	(569,000)	2. None.
Wolf Creek Dam--Lake Cumberland	4,577,000	6,488,000	
	(2,744,000)	(2,749,000)	1. None.
	(1,833,000)	(3,739,000)	2. Replace generator power cables to switchyard.
Center Hill Lake	4,737,000	5,251,000	
	(2,507,000)	(2,694,000)	1. None.
	(2,230,000)	(2,557,000)	2. None.

OHIO RIVER DIVISION
JUSTIFICATION OF ESTIMATE

APPROPRIATION TITLE: Operation and Maintenance, General, FY 1996

3. **Multiple Purpose Power** (continued)

State/ Project Name	**ESTIMATED OBLIGATIONS ($)** FY 1995 Total (Operations) (Maintenance)	FY 1996 Total (Operations) (Maintenance)	Reason For Change And Major Maintenance Items
Tennessee			
Cheatham Lock and Dam	$5,063,000 (2,218,000) (2,845,000)	$5,895,000 (2,416,000) (3,479,000)	1. None. 2. None.
Cordell Hull Dam and Reservoir	4,434,000 (2,317,000) (2,117,000)	4,192,000 (2,384,000) (1,808,000)	1. None. 2. None.
Dale Hollow Lake	3,853,000 (2,441,000) (1,412,000)	4,082,000 (2,669,000) (1,413,000)	1. None. 2. None.
J. Percy Priest Dam and Reservoir	3,749,000 (2,102,000) (1,647,000)	4,410,000 (2,292,000) (2,118,000)	1. None. 2. Rewind power plant generator; install water quality mixing pumps.
Old Hickory Lock and Dam	5,236,000 (2,976,000) (2,260,000)	7,281,000 (3,179,000) (4,102,000)	1. None. 2. None.

OHIO RIVER DIVISION
JUSTIFICATION OF ESTIMATE

APPROPRIATION TITLE: Operation and Maintenance, General, FY 1996

3. **Multiple Purpose Power** (continued)

State/ Project Name	ESTIMATED OBLIGATIONS ($) FY 1995 Total (Operations) (Maintenance)	ESTIMATED OBLIGATIONS ($) FY 1996 Total (Operations) (Maintenance)	Reason For Change And Major Maintenance Items
TOTAL--MULTIPLE PURPOSE POWER	$41,377,000 (21,426,000) (19,951,000)	$45,886,000 (22,900,000) (22,986,000)	
GRAND TOTAL--OHIO RIVER DIVISION	$226,502,000 (125,714,000) (100,788,000)	$240,682,000 (136,904,000) (103,778,000)	

PROJECTED CARRYOVER OF FY 1995 FUNDS

Mr. MYERS. Well, thank you, General. We have one other member now who lives in your division and within your responsibilities. I bragged a moment ago I was the only one here, but Mr. Rogers' district lies completely within your division also.

Several things. First off, I am concerned about what appears to be a slowdown in some of these projects. Because of change of design you say to save a lot of money, but is that one of the reasons why you have the $125 million carryover, part of the reason?

General GENETTI. No, sir, it is not. Principally, the project delays, and I can get into individual ones, but they are principally due to over optimistic programming as I mentioned. We had some very serious, unusually serious weather. For instance, at Olmstead we lost 173 calendar days because of high water and very high river conditions and velocity. At Gray's Landing as well as at Point Marion, we lost 79 and 123 days, respectively, mainly because of record cold and record snow.

We had bid protests at Winfield, which delayed the storage shed start there by six months, which had a related impact on the beginning of the lock. We had a number of events occur that produced that large carryover, but along with it was overoptimistic programming.

Mr. MYERS. You had a big carryover last year on Olmsted, that is two years in a row you had high water. Has that been pretty much the same problem?

General GENETTI. The principal reason last year was getting the environmental issues out of the way. We had some endangered species located near Olmsted that we had to work very closely with the Fish and Wildlife Service on to get resolved.

In addition, we did have some construction issues that eventually involved the Ballard wildlife area, and I am happy to report that both of those now seem like they are well on their way, and I don't anticipate, unless we get some very bad weather again, that we are going to have the same types of delays.

Mr. MYERS. Will you be able to catch up? Do you have to reduce the amount of the request this year for Olmsted, as an example?

General GENETTI. Our request this year is a result of a very strenuous analysis looking at the past, trying to, as best we can, project for 1995 and using that projection to then build our budget for 1996.

As of the 31st of January, we were right on target, and, in fact, in the Construction General area we are probably a little ahead of target. So I would anticipate at this point in time that we are going to be where we are saying we are going to be by the end of 1996, barring a catastrophe of weather or something along that line.

JOHNSTOWN, PENNSYLVANIA

Mr. MYERS. The Johnstown, Pennsylvania, construction, does that fit the criteria of this new—you were here this morning for the discussion we had with the Chief and the Acting Assistant Secretary about the new criteria for projects. Johnstown seems not to be a local issue. Are you going to continue construction there under the new criteria?

General GENETTI. As of this time, yes, sir. Johnstown is a Federal project. It is a federally maintained project, and we were, in fact, directed by act language to do the rehab.

Mr. MYERS. Aren't a lot of them Federal? They are authorized, but then you are going to, as I understand the discussion this morning, you are going to ignore all of those and put them over on to a local responsibility now.

General GENETTI. Well, sir, the six that we have, Johnstown being one of them, may well fit that category of being transferred eventually, but at this point in time on those six channel projects, we have responsibility to continue operation and maintenance, and this is one of those that we have that responsibility for. Most of them we turn over to a local sponsor after we complete. These six, Johnstown being one, has never been turned over. We have been directed to, in fact, operate and maintain it.

IMPACT OF PROPOSED FLOOD CONTROL POLICY

Mr. MYERS. What impact has this new criteria had on your division?

General GENETTI. Well, sir, at this juncture it is very difficult to say. We have done an analysis, immediate analysis as we understand what the policy is, and I would like to give you a more complete answer for the record.

We do know that some projects have been eliminated in 1996. However, it is purely speculative as to whether they would have survived the budget under the old policy, so to say that they didn't get in under the new policy I am not sure is the correct analysis. We can look at some in 1997 and assume based on what was presented by Dr. Zirschky that some will be affected certainly.

Mr. MYERS. If Congress goes along with it, that is the next question.

General GENETTI. Yes, sir.

Mr. MYERS. As you can tell this morning by the discussion.

[The information follows:]

IMMEDIATE ANALYSIS OF IMPACTS TO THE OHIO RIVER DIVISION AS A RESULT OF THE PROPOSED POLICY ON FLOOD CONTROL

The workload associated with flood control activities would decrease over time under the Administration's proposal. Commensurately manpower associated with flood control activities would be adjusted downward to reflect the smaller workload.

Recognizing that further clarification and guidance is required to detail accurately and completely the impacts to the Ohio River Division of the proposed changes to flood control policy, I will provide you the results of our preliminary analysis which is subject to further review and change:

FY 1996 Impacts

o Brevoort Levee, Indiana will be halted upon completion of reconnaissance phase. Follow on funding for the feasibility phase was not included within the President's budget.

o Upper Tippecanoe, Indiana will be halted upon completion of reconnaissance phase. Follow on funding for the feasibility phase was not included within the President's budget.

o Cheat River, West Virginia will be halted upon completion of reconnaissance phase. Follow on funding for the feasibility phase was not included within the President's budget.

o Oceana, West Virginia PED activities will not be initiated.

o All local protection flood control new starts for the reconnaissance or construction phases were not included within the President's budget. In our Division this affected six reconnaissance phase new starts located at Lexington-Fayette County, Kentucky; Killbuck, Ohio; Mahoning River Basin, Ohio and Pennsylvania; Whites Creek, Tennessee; Blacklick Creek, Ohio; and Pogues Run, Indiana; and one Construction phase new start located at Holes Creek, Ohio.

Fiscal Year 1997 Impacts [to items in the Fiscal Year 1996 President's budget]

o Metropolitan Cincinnati, Northern Kentucky, Ohio and Kentucky will be halted upon completion of the reconnaissance phase. Follow on funding in Fiscal Year 1997 for the feasibility phase will not be requested.

o Indianapolis North, Indiana will be halted upon completion of the feasibility phase. Follow on funding in Fiscal Year 1997 for the PED phase will not be requested.

o Wabash Middle Comprehensive, Indiana is under review and its final disposition relative to its status vis a vis the proposed policy changes is unclear because the study is considering both flood control and environmental restoration features. Clearly, those flood control features which are classified of local significance will not qualify for further funding. However, it is uncertain to us at this juncture whether or not the Administration would support further PED funding for those environmental restoration related features. We anticipate resolving this matter in the Fiscal Year 1997 budget process.

o Metropolitan Louisville, Pond Creek, Kentucky will be halted upon completion of PED in Fiscal Year 1996. Follow on funding for the Construction phase will not be requested.

o Metropolitan Cincinnati, Duck Creek, Ohio will be halted upon completion of PED in FY 1996. Follow on funding for the Construction phase will not be requested.

o Chartiers Creek, Pennsylvania will be halted upon completion of PED in FY 1996. Follow on funding for the Construction phase will not be requested.

o Levisa and Tug Forks of Big Sandy River and Upper Cumberland River, West Virgina, Virginia and Kentucky - Section 202 DPR funding request for FY 1997 will be strictly for continuing DPR's. No funding for new start DPR's will be requested.

o Continuing Authorities Program (CAP) funding will not be included in the FY 1997 budget request. Specific impacts to all ongoing CAP projects in the Ohio River Division can not be fully ascertained at this time. However, if a CAP project is approved during FY 96 or prior years for construction it will proceed to construction subject to the availability of CAP funds from prior years.

Turn Over of Projects to the Locals for Operation and Maintenance

o The Administration proposes to gradually transfer to appropriate local authorities, beginning in Fiscal Year 1998, the operation and maintenance of existing reservoir and channel improvement projects which meet the following criteria:

(1) More than 50 percent of the waters come from within the State.
(2) The project is not part of a Federally operated interstate system.
(3) The project's benefits are only in one State.

o We are still in the process of working with HQUSACE to define precisely the projects that fully meet this criteria for transfer. However, our preliminary analysis which is subject to further review and change include six local protection projects located at Johnstown, Pennsylvania; Massillon, Ohio; Middlesborough, Kentucky; Elkins, West Virgina; Roseville, Ohio; and Punxsutawney, Pennsylvania. Additionally, we have identified four reservoirs that appear to meet this criteria to include: West Fork of Mill Creek Lake, Ohio; Carr Fork Lake, Kentucky; Woodcock Creek Lake, Pennsylvania; and Martins Fork Lake, Kentucky.

TRUST FUNDS

Mr. MYERS. In your O&M, I think you had a request of $240,600,000. How much of that comes out of the trust account, the harbor maintenance trust account?

General GENETTI. None that I am aware of, sir.

Mr. MYERS. You mean the fuel tax going into this trust account, none of it comes out of there to pay for this O&M in your division?

General GENETTI. No, sir.

Mr. MYERS. Where does it go, then? If it doesn't go to the Ohio River Division, where in the world does it go to?

General GENETTI. Well, the trust fund monies that we draw on either will go against a construction general project, such as Olmsted or Winfield and occasionally if we have a major rehab, we would draw on trust fund monies, inland waterway trust fund monies likewise. To my knowledge, we are not drawing any monies, though, against purely operation and maintenance.

Mr. MYERS. It is just harbors, then, is the only thing it goes for?

General GENETTI. Yes, sir.

Mr. MYERS. Then the people who use the locks and dams, I thought that was the reason they paid this extra fuel tax a few years ago. What account does that go into, do you know?

General GENETTI. Fuel tax? It goes into the inland waterways trust fund, I believe.

Mr. MYERS. It is just for construction, not for operation?

General GENETTI. Yes.

Mr. MYERS. Well, I have been on the committee a lot of years. I guess it is about time I asked that question. I have some other questions for the second round. I think I have used my five minutes. Do you have some questions, Jim?

IMPACT OF PROPOSED FLOOD CONTROL POLICY

Mr. CHAPMAN. Mr. Chairman, thank you, but let me yield to my colleague who is within this division.

Mr. ROGERS. Thank you, Mr. Chairman. Thanks, Mr. Chapman, for the courtesy. General, good to see you, and all of your staff.

General GENETTI. Likewise, sir.

Mr. ROGERS. We enjoyed our helicopter day, I guess, last fall, helicoptering all over eastern Kentucky looking at flood projects. Appreciate the time and effort that you put into that among other things.

You were here this morning with the Assistant Secretary, in the audience, at least, when he testified, and I guess there is no point in us repeating to you all the adjectives that were used this morning to describe what we think of this proposal by the White House to in effect abdicate the job of helping to stop flooding on what they call on a local basis. I have never seen a flood yet that was not local. People are local. And I don't know how you would be able to determine where the water came from. You would spend all of your budget measuring which direction the water came from, would you not?

General GENETTI. Certainly a part of it, sir.

Mr. ROGERS. Were you consulted by the powers that be before that proposal came out of OMB?

General GENETTI. No, sir.

Mr. ROGERS. Can you tell us what impact such a—if we go along with that proposal, what would be the impact on projects in your division?

General GENETTI. The near term, sir, it would probably be minimal. When I say near term, as far as we can see in 1996; 1997 the impact would probably be more substantial because there some of the phases that we are in now would probably be completed, and as I understand the policy, we would not go forward with those.

There will obviously be some personnel impacts likewise that will be related to the downsizing as far as the lessening of the workload. I can give you a better data once we get the chance to do a more in-depth analysis, and we do have questions as far as the policy, too, and its application because there are several projects which don't seem to fit the category that we need to get answers on.

Mr. ROGERS. Well, for example, if you shut down the Section 202 projects in my district alone, the Nashville office might as well close up shop and high tail it.

General GENETTI. That is correct, sir.

Mr. ROGERS. That is the major construction work of that office, is it not?

General GENETTI. It is.

Mr. ROGERS. And I guess one of the main work projects in the Ohio Division.

General GENETTI. It is certainly a major one.

Mr. ROGERS. Well, of course, under this policy they would be not eligible, would they?

General GENETTI. The Section 202 program, as you know, Congressman, has never been budgeted with the exception of a couple of named communities within the legislation traditionally by the administration, no matter which administration it has been, so as far as how that might impact Section 202, it probably would not see much change. It would still not be budgeted.

Mr. ROGERS. By you?

General GENETTI. By us, that is correct.

Mr. ROGERS. Well, I mean, it is just a silly thing because we are half done on some of those huge projects. I think on Harlan we have spent $95 million or so so far and here comes the Corps and says zero for that project even though we have spent all that money with zero benefit so far, or little benefit.

It just seems absolutely like a sophomoric game to go through this business when you know the Congress will fund them. I mean, we have for 12 years, I guess, or so, thanks to the good leadership of Chairmen Myers and Bevill, and I hope we will continue to finish those projects. But it seems to me like it is just an abdication of your budget responsibilities when you don't budget for these things, knowing the Congress is going to do it. And you force us to micromanage your agency, which we shouldn't be in the business of doing, but when you abdicate it, knowing full well that the Congress is going to go the opposite direction, you abdicate that responsibility. I am talking about the Corps, not you personally. Do you have a comment on that?

General GENETTI. I cannot disagree with you, Congressman.

METRO CENTER LEVEE, TENNESSEE

Mr. ROGERS. Now, the Metro Center levee project in Nashville, was that affected by the changes that are recommended by the White House?

General GENETTI. No, sir, at least as we understand it is not.

Mr. ROGERS. Why would that not be affected?

General GENETTI. I believe it meets the criteria. It is interstate flooding related.

Mr. ROGERS. Will there be a local cost share of 75 percent? The City of Nashville is going to pay 75 percent of the cost then?

General GENETTI. I believe that will be the local cost share, 75 percent.

Mr. ROGERS. What is the other condition, oh, the 2 to 1 ratio, it qualifies at a 2 to 1 ratio?

General GENETTI. We don't know at this time, sir. We are just now beginning the reconnaissance. Until we get into it, we won't know whether, in fact, it does meet this criteria.

Mr. ROGERS. Well, you are spending money for it.

General GENETTI. We are in the reconnaissance study phase of the study.

Mr. ROGERS. How can you do that if the policy is that it has to meet these three criteria before you spend any money?

General GENETTI. Well, the reconnaissance study generates the information that gives us the necessary background of whether or not it is going to meet the criteria. Reconnaissance is traditionally 100 percent funded, Federally funded. Where the impacts will be is when we go into the feasibility and then if we go into construction.

Mr. ROGERS. What is the anticipated cost of that project?

General GENETTI. Sir, at this point in time I don't believe we have a—we just know what costs we have budgeted for the reconnaissance, but we don't have any idea what the——

Mr. ROGERS. That was $400,000?

General GENETTI. $400,000.

BUDGETING FOR SECTION 202 ELEMENTS

Mr. ROGERS. Well, rather than go through with you here in the open hearing the status of each of the projects in my district, there are quite a few, perhaps we could do that for the record?

General GENETTI. Certainly.

[The information follows:]

LEVISA AND TUG FORKS OF BIG SANDY RIVER AND UPPER CUMBERLAND RIVER, WEST VIRGINIA, VIRGINIA AND KENTUCKY

Mr. ROGERS. How much has been requested for Section 202 projects in the Fiscal Year 1996 request? Please describe by project element.

General GENETTI. The Fiscal Year 1996 budget request for Section 202 is $6,300,000. I will provide for the record a breakdown of this request by project element.

(The information follows:)

SECTION 202 FISCAL YEAR 1996 BUDGET REQUEST

Grundy, Virginia - $400,000 is included to continue engineering and design efforts, execute a Project Cooperation Agreement, and begin floodproofing and floodplain evacuation.

Matewan, West Virginia - $1,400,000 is included to continue construction of the floodwall/levee, pump station and complete site development and initiate relocations to the Mate Creek Housing and Community Development Site.

Detailed Project Reports - $4,230,000 is included to initiate or continue Detailed Project Reports on McDowell County, West Virginia; Martin County, Kentucky; Wayne County, West Virginia; Harlan County, Kentucky; and the city of Cumberland, Kentucky. The Fiscal Year 1996 budget request also includes $270,000 to complete the general plan for Levisa Fork Basin in Kentucky and Virginia.

Mr. ROGERS. What is the Fiscal Year 1996 capability for the Harlan, Williamsburg, Middlesborough, and Pike County elements? If capability for any of these is zero, please provide the amount which could be used by the Corps in Fiscal Year 1996 to undertake continued planning, design or construction.

General GENETTI. Let me begin by stating that although project capabilities reflect the readiness of the work for accomplishment, they are in competition for available funds and manpower Army-wide. In this context, the capability amount provided here considers the project by itself without reference to the rest of the program. However, it is emphasized that the total amount proposed for the Army's Civil Works program in the President's Budget is the appropriate amount consistent with the Administration's assessment of national priorities for Federal investments and the objectives of avoiding large budget deficits and the serious adverse effect that Government borrowing is having on the national economy. In order to maintain these overall budgetary objectives, we could only utilize additional funds on individual projects and studies if offsetting reductions were taken. Additionally, the Administration has identified economic and policy concerns with construction of these elements. Having said that, I will provide the approved Fiscal Year 1996 capability for the Harlan, Williamsburg, Middlesborough, and Pike County project elements for the record.

(The information follows:)

FISCAL YEAR 1996 CAPABILITY FOR SELECTED SECTION 202 ELEMENTS

Harlan, Kentucky - The Fiscal Year 1996 capability is $12,600,000. Funds would be used to continue construction of the Phase III Loyall diversion, initiate construction of the Rio Vista levee and floodwall/closure structures, and continue nonstructural floodproofing and land acquisition.

Williamsburg, Kentucky - The Fiscal Year 1996 capability is $4,100,000. Funds would be used to complete real estate acquisition, award levee/floodwall contract, and continue floodproofing/acquisition.

Middlesborough, Kentucky - The Fiscal Year 1996 capability is $1,600,000. Funds would be used to design channel modifications, acquire real estate, and continue nonstructural floodproofing and acquisition.

Pike County, Kentucky - We have no Fiscal Year 1996 capability. However, we have projected carryover funds from Fiscal Year 1995 that will be used to continue nonstructural measures. These funds are sufficient to complete Phase I, which includes Buskirk and McCarr areas and is scheduled for completion in Fiscal Year 1996.

Mr. ROGERS. Have Fiscal Year 1996 requirements for any Kentucky Section 202 elements changed since submission to OMB? If so, please indicate.

General GENETTI. Since submission of the Fiscal Year 1996 budget request to OMB, we have reevaluated our funding requirements for all elements of the Section 202 project based upon a realistic assessment of each element's schedule. I will provide for the record the changes since submission to OMB.

(The information follows:)

CHANGES TO FISCAL YEAR 1996 BUDGET REQUEST SINCE SUBMISSION TO OMB FOR KENTUCKY SECTION 202 ELEMENTS

Project Element	Amount
Pike County, Kentucky (Nonstructural)	-$2,420,000
South Williamson, Kentucky (Nonstructural)	-$2,600,000
Harlan, Kentucky	-$24,100,000
Williamsburg, Kentucky	-$4,300,000

Mr. ROGERS. Is current and planned work on the Middlesborough element consistent with the directions provided in the Fiscal Year 1995 Energy and Water Development Appropriations Act?

General GENETTI. Yes. We are proceeding in compliance with this direction. Work on the Middlesborough element is proceeding consistent with the language contained in the Fiscal Year 1995 Energy and Water Development Appropriations Act. Fiscal Year 1995 funds are being used to complete the National Environmental Protection Act process, negotiate and execute the Project Cooperation Agreement and initiate floodproofing/acquisition of eligible structures.

Mr. ROGERS. What is the status of the Harlan, Barbourville, Williamsburg, Middlesborough, and Pike County elements?

General GENETTI. I will provide for the record the status of the requested project elements.

(The information follows:)

STATUS OF SELECTED SECTION 202 PROJECT ELEMENTS

Harlan, Kentucky - Structural: Fiscal Year 1994 carryover funds and Fiscal Year 1995 funds are being used to complete the Phase II Harlan floodwall contract, initiate construction of the Phase III Loyall diversion, and initiate and complete construction of the Rio Vista sewage collection system. Nonstructural: Work is continuing on Phase II, East Harlan, and Phase IV, Cumberland River area.

Barbourville, Kentucky - Structural: The levee/floodwall is physically complete. Nonstructural: The nonstructural element is well underway. Out of 58 eligible structures, 17 have been evacuated, and 10 raised or demolished. Carryover funds from Fiscal Year 1994 will be used to complete floodproofing and acquisition of remaining structures in the South Main, Boone Heights and Heidrick areas.

Williamsburg, Kentucky - Structural: The Project Cooperation Agreement has been approved and is scheduled to be executed in March 1995. Plans and specifications are being prepared for the levee/floodwall. Nonstructural: Real estate acquisition and floodproofing efforts will be initiated upon execution of the PCA.

Middlesborough, Kentucky - Available funds are being used to complete the NEPA process, negotiate and execute the PCA and initiate floodproofing/acquisition of eligible structures.

Pike County, Kentucky - The PCA was executed in October 1994. A landowner's meeting was held in October 1994 to initiate Phase 1 of the four-phase plan. For Phase 1, which includes the Buskirk and McCarr communities, 95 percent of eligible participants have signed up for the voluntary floodproofing and acquisition. Work underway includes certification of applications, title searches, hazardous waste investigations, surveying and monumentation, appraisals, preparation of floodproofing designs, coordination with owners, and solicitation of contractors for floodproofing.

Mr. ROGERS. What is the status of the Levisa Fork Basin/Haysi Dam study?

General GENETTI. Plan formulation is continuing, with current efforts to recommend the best overall flood damage reduction plan for the Levisa Fork Basin, which includes the Haysi, Virginia, area. The study is focusing on development of four alternatives, including a locally preferred plan that will consist of a lake near Haysi, with adequate storage to provide releases for whitewater rafting along the Russell Fork River, along with complimentary nonstructural measures. A preliminary draft report is scheduled for completion in March 1995.

Mr. ROGERS. What do you expect to obligate in Fiscal Year 1995 on each investigation and project report for Section 202, Kentucky, and what are your estimated requirements in Fiscal Year 1996 for each?

General GENETTI. I will provide the amount which we expect to obligate in Fiscal Year 1995 and the estimated Fiscal Year 1996 requirements on Detailed Project Reports in Kentucky for the record.

(The information follows:)

FISCAL YEAR 1995 AND FISCAL YEAR 1996 FUNDING DATA FOR KENTUCKY SECTION 202 DETAILED PROJECT REPORTS

Detailed Project Report (DPR)	Estimated Fiscal Year 1995 Obligations	Estimated Fiscal Year 1996 Requirement 1/
City of Cumberland, Kentucky	$ 225,000	$ 800,000
Clover Fork, Kentucky	353,000	0 2/
Harlan County, Kentucky	0	800,000
Levisa Fork Basin, Virginia and Kentucky	824,000	333,000
Martin County, Kentucky	850,000	670,000
Total	$2,252,000	$2,603,000

1/ Amounts shown include the budget request and unobligated carryover funds; these amounts fully meet our total Fiscal Year 1996 funding requirements.
2/ Completion funding was provided in Fiscal Year 1995.

Mr. ROGERS. **Please provide the percent complete at the end of Fiscal Year 1994 and Fiscal Year 1995 for each Section 202, Kentucky project element which has been funded for construction to date.**

General GENETTI. I will provide for the record the percent complete at the end of Fiscal Year 1994 and Fiscal Year 1995 for each Section 202 Kentucky project element funded for construction.

(The information follows:)

PERCENTAGES COMPLETE FOR KENTUCKY SECTION 202 PROJECT ELEMENTS

Project Element	Percent Complete Fiscal Year 1994	Percent Complete Fiscal Year 1995
Barbourville, Kentucky:		
Structural	99	100
Nonstructural	52	100
Harlan, Kentucky:		
Structural	52	64
Nonstructural	22	25
Middlesborough, Kentucky:		
Structural	0	18
Nonstructural	0	11
Pike County, Kentucky (Nonstructural)	5	9
Pineville, Kentucky:		
Structural	100	100
Nonstructural	100	100
South Williamson, Kentucky:		
Structural	95	96
Nonstructural	99	100
Williamsburg, Kentucky		
Structural	5	33
Nonstructural	0	25

SALYERSVILLE, KENTUCKY

Mr. ROGERS. What is your capability for Fiscal Year 1996 for the Salyersville, Kentucky project? If approved capability is zero, please provide the amount which can be used in Fiscal Year 1996 on planning, design or construction.

General GENETTI. The Fiscal Year 1996 approved capability for Salyersville, Kentucky is $500,000 subject to the same conditions as previously noted. However, the Administration has identified economic and policy concerns with construction of this element. These funds would be used to initiate construction on the cut-through.

JACKSON CY-BEND, KENTUCKY

Mr. ROGERS. Provide the status of the Jackson, Kentucky, (Cy-Bend cut-through) project being planned under Section 205. When will the feasibility study be completed?

General GENETTI. The reconnaissance study identified a feasible project using a channel cutoff with a 25-foot bottom width located at Cy-Bend and recommended transfer to the Section 205 of the Continuing Authorities Program. Cy-Bend is located about 6 miles downstream of Jackson, Kentucky. A cost shared feasibility study was initiated in February 1994 to identify project features that maximize national economic development benefits. The feasibility study is proceeding on schedule, with a scheduled completion date of October 1995.

Mr. ROGERS. Will it be possible to begin real estate acquisition on the Jackson project in Fiscal Year 1995? Please provide a detailed schedule on the Jackson Project including proposed dates for real estate acquisition and construction.

General GENETTI. No, sir. Assuming no phase-out of the Section 205 program, plans and specifications would be initiated and completed in Fiscal Year 1996. Real estate acquisition by the local sponsor would occur in Fiscal Year 1997. Construction would start in early Fiscal Year 1998. If real estate acquisition occurs quicker than scheduled, construction could be started sooner.

HAZARD, KENTUCKY

Mr. ROGERS. What is the status of the specific project report of the Hazard, Kentucky project?

General GENETTI. The specific project report will not fully commence until the local sponsor selects a locally preferred plan. We have coordinated alternative flood control plans with them and are awaiting their decision.

KENTUCKY RIVER LOCKS AND DAMS 5 - 14, KENTUCKY

Mr. ROGERS. What is the status of repairs being made to Kentucky River Locks and Dams 5 - 14?

General GENETTI. The Corps is continuing to undertake critical maintenance repairs to safeguard the water supply function of the dams on the Kentucky River. The Corps, in conjunction with Commonwealth of Kentucky officials, developed a prioritized list of repairs which relate to water supply. This work was divided into three contracts. Work included in the initial contract was completed in October 1994. Work included in the second contract is currently scheduled for completion in May 1995. The third contract is currently scheduled for award in April 1995 and completion in December 1995. The Corps will complete critical maintenance repairs originally identified on the priority list subject to availability of funds. Funds in the amount of $10,000,000 have been made available for this work to date.

Mr. ROGERS. Will any additional funds be needed to complete this work?

General GENETTI. We have no approved capability for additional work on Kentucky River Locks and Dams 5 - 14 because the Administration has identified economic and policy concerns with accomplishing this work. However, up to $6,500,000 in additional appropriations could be utilized for identified repair work on this project. During construction of repairs by the Corps, it was determined that additional funding in the amount of $3,000,000 is needed to complete remaining priority list water supply repairs at Dams 11 and 14. In addition to the water supply repairs, funding in the amount of $3,500,000 could be utilized to perform repair work at Dams 12 and 13 identified by the Commonwealth of Kentucky.

JOHN W. FLANNAGAN DAM AND RESERVOIR, VIRGINIA

Mr. ROGERS. The conference report to accompany the Fiscal Year 1995 Energy and Water Development Act contains instructions to carry out whitewater release studies at Flannagan Dam. What is the status of this study?

General GENETTI. Study activities are underway and are currently scheduled for completion in September 1996. The study will examine measures for enhanced whitewater recreation as well as associated impacts on other project purposes and the environment. The Corps has coordinated with various interest groups, government representatives and resource agencies to develop a consensus on the direction of the study. The study will examine measures for enhanced whitewater recreation and the associated impacts on other project purposes and the environment. The specific focus of the study will concern 1,000 cubic feet per second releases for five hours duration on the last weekend of September and the first four weekends of October.

BUCKHORN LAKE, KENTUCKY

Mr. ROGERS. The conference report to accompany the Fiscal Year 1995 Energy and Water Development Act contains instructions to complete the special project report concerning road flooding problems at Buckhorn Lake, Kentucky. What is the status of this report?

General GENETTI. The study of flooding of State Highway 257 is underway and a report is currently scheduled for completion in September 1995. The study will examine possible solutions to the periodic roadway flooding which occurs during flood control operations at Buckhorn Lake. The report will include a comparison of the existing condition with a possible solution involving raising the roadway above the maximum flood pool elevation as well as an intermediate solution involving raising the roadway to an elevation with only a 20 percent chance of a flood occurrence in any given year.

YATESVILLE LAKE, KENTUCKY

Mr. ROGERS. How much is requested in the Fiscal Year 1996 Construction, General and Operation and Maintenance accounts for the Yatesville Lake, Kentucky project? How will these funds be utilized?

General GENETTI. The Construction, General Fiscal Year 1996 budget request includes no additional funds for Yatesville Lake, Kentucky. All programmed construction activity has been funded; the remaining unfunded construction activity consists entirely of unprogrammed recreation work.

The Operation and Maintenance Fiscal Year 1996 budget request for Yatesville Lake, Kentucky is $1,033,000, which includes $997,000 for annual routine operations activities and $36,000 for needed maintenance for the project.

LEVISA AND TUG FORKS OF BIG SANDY RIVER AND UPPER CUMBERLAND RIVER, WEST VIRGINIA, VIRGINIA AND KENTUCKY - GRUNDY, VIRGINIA ELEMENT

Mr. ROGERS. General, this morning Dr. Zhirschky was here and I asked him why the Grundy element of the 202 program was funded and other elements were not. Since you are closer to all these elements, do you have anything to add? Why is the Grundy, Virginia element of the Section 202 program being funded and other elements are not? Why is Grundy being treated differently?

General GENETTI. Grundy, Virginia is one of several projects specifically named in the Fiscal Year 1981 Energy and Water Development Appropriations Act authorizing and directing the design and construction of flood control measures at full Federal expense. In addition, the project provides a unique opportunity to combine a Federal flood control project and a State highway improvement project that will significantly reduce the cost to both, Federal and State governments, for separately designed and constructed projects for these purposes.

FLOOD CONTROL POLICY

Mr. ROGERS. What are your feelings on the new Corps policy proposals? What effect will they have on the Ohio River Division?

General GENETTI. The policy is a response to the President's efforts to reduce the Federal budget deficit by downsizing the Federal Government and focuses the considerable technical capabilities of the Corps on missions of National significance. Additional implementing guidance and clarification from HQUSACE is necessary prior to commenting on the detailed and specific impacts of these proposals on the Ohio River Division. However, generally speaking they will result in a smaller workload for flood control with a commensurate reduction in associated manpower.

LEVISA AND TUG FORKS OF BIG SANDY RIVER AND UPPER CUMBERLAND RIVER, WEST VIRGINIA, VIRGINIA AND KENTUCKY - HARLAN, KENTUCKY ELEMENT

Mr. ROGERS. Let me ask you about the Harlan project. What phase of work are you in now? Are you more than halfway finished? Will you be more than halfway finished at the end of Fiscal Year 1995?

General GENETTI. Construction of Phase I, Clover Fork diversion tunnels, at Harlan was completed in December 1992. Construction of Phase II, Harlan levee/floodwall, is ongoing with completion scheduled for October 1995. The initial Phase III contract for the Loyall diversion was awarded in September 1994. A contract to install the Rio Vista sewage collection system will be awarded March 1995 and the final contract, Loyall/Rio Vista floodwall and closures, will be awarded in September 1995. The structural component of the Harlan project is estimated to be currently at 54 percent complete; based on the current schedule of construction activities project completion will be approximately 64 percent by the end of Fiscal Year 1995.

Mr. ROGERS. Based on your schedule, what work will you be accomplishing with the funds made available in Fiscal Year 1995?

General GENETTI. A number of project activities are underway for the structural and nonstructural elements of the Harlan project. The primary construction activities scheduled for Fiscal Year 1995 include completion of the Harlan levee/floodwall and continuation of the Loyall/Rio Vista cutoff and levee. Real estate acquisition and associated relocations will continue through the year; design for the Loyall/Rio Vista floodwall and structures will also continue in Fiscal Year 1995. Nonstructural work on Phase III East Harlan and Phase IV Cumberland River area will continue in Fiscal Year 1995.

LEVISA AND TUG FORKS OF BIG SANDY RIVER AND UPPER CUMBERLAND RIVER, WEST VIRGINIA, VIRGINIA AND KENTUCKY - WILLIAMSBURG, KENTUCKY ELEMENT

Mr. ROGERS. In regards to Williamsburg, what will the Corps be doing in Fiscal Year 1995 with the funds made available?

General GENETTI. Plans and specifications for the levee/floodwall will be completed with the funds made available. Real estate acquisition will be initiated following execution of the Project Cooperation Agreement in March 1995.

Mr. ROGERS. Will the problems with the PCA be straightened out so the construction schedule is not negatively impacted?

General GENETTI. Yes, the PCA was approved by the ASA(CW) on 21 February 1995. Authority for execution of the PCA with the sponsor has been delegated to the District Engineer.

Mr. ROGERS. Assuming you receive needed funding next year, what work could you accomplish in Fiscal Year 1996?

General GENETTI. The additional funds would be used to complete real estate acquisition and award the levee/floodwall contract.

LEVISA AND TUG FORKS OF BIG SANDY RIVER AND UPPER CUMBERLAND RIVER, WEST VIRGINIA, VIRGINIA AND KENTUCKY - MIDDLESBOROUGH, TENNESSEE ELEMENT

Mr. ROGERS. What progress can we expect on the Middlesborough project in Fiscal Year 1995? Is the PCA going forward as planned?

General GENETTI. The final National Environmental Protection Act requirements are scheduled to be completed in April 1995. Upon completion of the NEPA requirements and review of the Detailed Project Report by the ASA(CW), the Project Cooperation Agreement and financial plan will be completed; execution of the PCA is scheduled for June 1995.

Mr. ROGERS. Are you experiencing or do you expect to have similar problems with the Middlesborough PCA as you are having with the Williamsburg PCA?

General GENETTI. The problems encountered with processing the Williamsburg PCA were primarily associated with interpretation of the Corps cost sharing guidelines pertaining to structural and nonstructural projects. The issues that were raised have now been clarified and should not impact processing the Middlesborough PCA.

Mr. ROGERS. Please provide a status report on the Middlesborough PCA. If you do not have the information in hand, please provide it for the record.

General GENETTI. The Middlesborough PCA will be modified to be consistent with the Williamsburg PCA. It is anticipated that the final PCA will be negotiated with the City of Middlesborough and forwarded to HQUSACE upon approval of the DPR and completion of NEPA documentation. The PCA is scheduled for execution in June 1995.

SALYERSVILLE, KENTUCKY

Mr. ROGERS. What is the status of the Salyersville project?

General GENETTI. A Supplement to the July 1989 Special Project Report was approved in October 1994. The SPR will serve as the technical document to support Project Cooperation Agreement execution. Plans and specification are currently being prepared for the first construction contract.

Mr. ROGERS. Will the Salyersville project be using the model PCA which is being used for the Williamsburg and Middlesborough projects?

General GENETTI. The model PCA, as modified for Williamsburg, will be used as the basis for negotiating the Salyersville project.

Mr. ROGERS. What funding will be necessary in Fiscal Year 1996 to begin construction of this project?

General GENETTI. The Fiscal Year 1996 approved capability for Salyersville, Kentucky is $500,000 subject to the same conditions as previously noted. However, the Administration has identified economic and policy concerns with construction of this element. These funds would be used to initiate construction on the cut-thru.

LEVISA AND TUG FORKS OF BIG SANDY RIVER AND UPPER CUMBERLAND RIVER, WEST VIRGINIA, VIRGINIA AND KENTUCKY - PIKE COUNTY, KENTUCKY ELEMENT

Mr. ROGERS. As you know, the Pike County project continues to receive support from this subcommittee. However, the citizens in the area are concerned that we are coming up on flood season and there have been little or no raising or floodproofing of structures. Can we expedite this work in any way?

General GENETTI. Efforts are underway to expedite implementation of the nonstructural plan. In particular, real estate crews are personally meeting with each applicant to explain the process and complete preliminary paperwork prior to receipt of appraisal and final negotiations. Every effort has been made to expedite this work. The Buskirk/McCarr phase is scheduled for completion in the Spring 1996.

Mr. ROGERS. Where can we expect to see action on the nonstructural portions of the project by the Corps in Fiscal Year 1995?

General GENETTI. In Fiscal Year 1995 efforts will concentrate on the Buskirk and McCarr areas. As of February 1995, 55 approved applications have been received out of 69 eligible for floodproofing; 12 sites have been inspected; 8 sites have plans and specifications completed for house raising; 3 sites have turned in contractor price proposals; and one site has completed price negotiations.

As of February 1995, 40 approved applications have been received out of 55 eligible for acquisition; 20 title searches are complete; and 40 appraisals have been ordered.

LEVISA AND TUG FORKS OF BIG SANDY RIVER AND UPPER CUMBERLAND RIVER, WEST VIRGINIA, VIRGINIA AND KENTUCKY - MARTIN COUNTY, KENTUCKY ELEMENT

Mr. ROGERS. What is the status of the initial planning of the Martin County project?

General GENETTI. The Initial Project Management Plan was approved in October 1994. Work on the Detailed Project Report is underway with completion scheduled for September 1997.

Mr. ROGERS. What funding will be necessary to conduct a Detailed Project Report for the Martin County project?

General GENETTI. The estimated cost to complete a DPR is $1,900,000. Through Fiscal Year 1995 $947,000 has been allocated. An additional $620,000 is included in the Fiscal Year 1996 budget to continue the preparation of the DPR.

JACKSON CY-BEND, KENTUCKY

Mr. ROGERS. I appreciate the flexibility and the patience of the Louisville District on the Jackson project, and I think we are at a point where we can finish the feasibility study. Once that is finished, when can we begin construction?

General GENETTI. Real estate acquisition by the sponsor will occur in Fiscal Year 1997 followed by construction in Fiscal Year 1998.

Mr. ROGERS. If the Section 205 program is phased out as the Administration proposes, will the Jackson project require additional authorization from Congress to begin construction?

General GENETTI. As we now understand, Jackson will not be impacted by the new Administration proposal because the project will be approved for construction in Fiscal Year 1996. However, if Section 205 funds are not available for construction, we will not proceed with this phase.

Mr. ROGERS. What can be done to accelerate the Jackson project?

General GENETTI. Our schedule has already eliminated the need for a design memorandum and we will move directly from the feasibility report to completion of plans and specifications. In addition, we will attempt a strategy in which acquisition of real estate by the local sponsor could begin prior to completion of the plans and specifications. We also could initiate plans and specifications early, at the completion of the draft feasibility report, in the fourth quarter of Fiscal Year 1995 with permission from higher headquarters which could accelerate construction to an earlier point in Fiscal Year 1997. This could save several months on the schedule. This may expose the sponsor to some uncertainly concerning the final cost estimate to which they would have committed. However, these efforts could accelerate the start of construction several months from early Fiscal Year 1998 to sometime in early to mid-Fiscal Year 1997.

BUCKHORN LAKE, KENTUCKY

Mr. ROGERS. As you know, this subcommittee directed the Corps to complete an alternatives study for the road flooding problems at Buckhorn Lake. Can you tell us where that study stands at this point?

General GENETTI. The study of flooding of State Highway 257 is underway and a report is currently scheduled for completion in September 1995. The study will examine possible solutions to the periodic roadway flooding which occurs during flood control operations at Buckhorn Lake. The report will include a comparison of the existing condition with a possible solution involving raising the roadway above the maximum flood pool elevation as well as an intermediate solution involving raising the roadway to an elevation with only a 20 percent chance of a flood occurrence in any given year.

JOHN W. FLANNAGAN DAM AND RESERVOIR, VIRGINIA

Mr. ROGERS. I understand that you held some additional whitewater releases from Flannagan Dam last fall. How did these test runs go?

General GENETTI. Two test releases of 1,000 cubic feet per second were made on Sunday October 16 and Sunday October 23, 1994. Both releases were made on days that had already been scheduled for whitewater releases. Preliminary test results indicate that the test release of 1,000 cubic feet per second did not appear to significantly alleviate all the obstacles hindering raft navigation. Also, the 1,000 cubic feet per second release did not appear to impact Federally endangered species. Results of user satisfaction surveys to determine if there is a discernable difference in the quality of the whitewater experience between the 800 and 1,000 cubic feet per second releases and results of the reservoir modelling are incomplete at this time.

Mr. ROGERS. As you know, this kind of activity greatly increases tourism and rafters on the Russell Fork, and I am greatly supportive of those efforts. Would it be possible to conduct similar tests this fall?

General GENETTI. At this time, a need for additional test releases does not exist. If the data collected from the October 1994 completed tests are determined to be incomplete, additional tests may be requested, provided that current environmental studies do not indicate any potential for significant environmental damages.

Mr. ROGERS. What is the status of the study associated with these releases?

General GENETTI. Study activities are underway and are currently scheduled for completion in September 1996. The study will examine measures for enhanced whitewater recreation as well as associated impacts on other project purposes and the environment. The Corps has coordinated with various interest groups, government representatives and resource agencies to develop a consensus on the direction of the study. The study will examine measures for enhanced whitewater recreation and the associated impacts on other project purposes and the environment. The specific focus of the study will concern 1,000 cubic feet per second releases for five hours duration on the last weekend of September and the first four weekends of October.

Mr. ROGERS. I will ask the questions, then, for the record, if you could respond to those rather than go through them separately.

Now, apparently the Corps or OMB, although in the past you have never put money in for the Section 202 projects for the last dozen years or so, this time put in money for Grundy, Virginia. Among the dozens of Section 202 projects, all of them were considered not feasible or—didn't meet up to these criteria, and besides that it was a Section 202, which is a no-no in your book, but Grundy snuck through and I am fascinated by that. Can you help me out with that?

General GENETTI. Sir, I can give you some rationale. First of all, I want to correct a statement. Grundy is one of several named communities in the authorizing legislation for Section 202. Matewan was one; Williamson was one.

Mr. ROGERS. There are some more that have not been funded.

General GENETTI. That is correct. However, they were, in fact—on an annual basis funded or budgeted by the administration.

Mr. ROGERS. Which ones?

General GENETTI. Both Matewan and Williamson. And Grundy falls in that same category. Number two——

Mr. ROGERS. What category is that?

General GENETTI. It is a named community in the authorizing legislation.

Mr. ROGERS. But I say to you there are some other named communities that nothing has been done on or very little and nothing by the Corps until we made you do it.

General GENETTI. Yes, sir.

Mr. ROGERS. So what distinguishes them from those others?

General GENETTI. The only other distinguishing characteristic that I can come up with is the combination of the money we are receiving from the Department of Transportation and HUD in working to incorporate the new highway into the flood protection project at Grundy that is unique and involves a number of agencies working together.

Mr. ROGERS. We did exactly the same thing in Pineville, Kentucky, State highway, Federal highways, local. The Corps zeroed that one out from day one, every year. Now, what is the difference?

General GENETTI. I cannot see any difference, sir.

Mr. ROGERS. I can't, either. Why don't we check into it. I think I can tell you, but——

[CLERK'S NOTE.—The Corps of Engineers provided additional information as follows:]

The Pineville, Kentucky element of the Levisa and Tug Forks of the Big Sandy River and Upper Cumberland River, West Virginia, Virginia, and Kentucky was included in the President's budget in Fiscal Years 1985, 1986, 1987, 1988 and 1989.

Mr. ROGERS. Well, you know, we are a Nation of laws, not men, supposedly, and everyone should be treated fairly and evenly, exactly the same, and I do not think that is happening, and I, for one, don't like it.

Number two, it just is a seething thing with me that the Corps has never seen fit to put the first penny in for the Section 202 projects in Kentucky, although you have for West Virginia and now for Virginia.

Number three, I think it is an absolute abdication of responsibility, not on your part, but on the part of the White House in making it impossible for the Corps to be included in practically any flood control project. Now, you say the Nashville project qualifies. Well, that is the Cumberland River and sure enough it does go to Tennessee from Kentucky where it has already done its damage.

When it gets to Nashville it is a tame animal. In my district the Cumberland is a wild and very dangerous river, but under the new criteria the rampaging Cumberland in my State, because it originates there, would be disqualified from flood work, but when it gets to Nashville, a tame river by then, it is eligible, and that just illustrates by itself the utter stupidity of such a policy, and I think you heard this morning the short shrift that policy is going to get from this subcommittee, and that is putting it mildly, I hope, Mr. Chairman. I suspect my five minutes are expired. So I will wait a second round.

IMPACT OF PROPOSED FLOOD CONTROL POLICY

Mr. MYERS. I think you have used the second round, but—Mr. Chapman.

Mr. CHAPMAN. Thank you, Mr. Chairman.

General let me formally welcome you here, and as a past district engineer from my neck of the woods, and with some significant experience with both the Fort Worth District office and the Southwestern Division, I want to follow up on my colleague's questions because I think the point he makes about the new policy is one that perhaps, and I am sorry I missed this morning's hearings, but one that I have been very, very concerned about.

Let me ask you, in a place that is the size of Texas wherein a lot of the rivers pretty much are contained within the State and hundreds of millions of dollars of flood damage have been done, over hundreds of miles, all within the borders of Texas, and, again, I am asking this as a hypothetical, because I know that the territory where you now operate is no longer my State, but having had experience there, as I understand this policy, large States or States at least within which flood damage over many miles, hundreds of miles perhaps can be totally contained within the geography of that State would no longer qualify for the involvement of the Corps for support under this new policy. Would that be right?

General GENETTI. That is correct.

Mr. CHAPMAN. Arguably, we would have most of, other than the rivers in my State that form a boundary, the Red River, and perhaps the Sabine and then we have got one that kind of meanders along that separates us from Mexico. But I mean literally there would be thousands and thousands of miles of rivers that do hundreds of millions of dollars of damage that could not qualify, impacting the lives of—in some cases these things terminate in places like Houston where there are millions of people.

General GENETTI. Yes, sir.

Mr. CHAPMAN. Well, let me echo what my colleagues have said, and I hope it will be even shorter than short shrift, Mr. Rogers, from the standpoint of this policy. I think it is absolutely ludicrous for a variety of reasons to suggest that damage that perhaps can impact millions of our citizens and some of the things the City of

Houston could not possibly contemplate, they are at the end of damage and acts of nature that occur oftentimes miles, hundreds of miles away, and to somehow suggest that that kind of economic impact and impact in human terms is not an appropriate concern of the Congress is, I think, incredible.

Mr. ROGERS. Will the gentleman yield?

Mr. CHAPMAN. Surely I yield.

Mr. ROGERS. On top of that, the laws of the country, as I understand them, give jurisdiction to the Coast Guard over navigable streams and the Corps of Engineers over—maybe I have got that wrong. At least the Corps of Engineers has jurisdiction over all streams that feed into a navigable stream I think it is, and yet—and the States can't do a doggone thing to one of their own creeks or rivers even though it originates within their State and stays entirely within the State.

It is still a Corps of Engineers body of water, which means the State can't go in there and do any flood control work because they have jurisdiction of it, so who is going to do it if the Corps prevents the States from doing it and won't pay for it themselves, and the local communities, of course, don't have the money nor the authority on that stream that floods them. It just seems like it is an absolute—it is ludicrous, as you say. Thank you.

Mr. CHAPMAN. Of course, general, I, and you know this, our relationship goes back to the early days of a project on which construction actually began in earnest the year I came to Congress, and I wanted to say that I have always appreciated your support for those projects that are within the First Congressional District of Texas and the good job you did when you were in the Southwest division, and I appreciate that you are continuing to do a good job and congratulate you for that, welcome you once again before this committee, wish you well and tell you that I am sure to the best extent we can, and I think I know you well enough to know that I expect some of the things perhaps you cannot say here, this committee shares your mindset, and we are going to do, I think, everything we can to help in the Ohio River Division, so I appreciate your testimony. Thank you, Mr. Chairman.

IMPACT OF PROPOSED FLOOD CONTROL POLICY

Mr. MYERS. Well, thank you, Jim. Unfortunately, each of the division commanders coming before us are going to be pistol whipped by the committee it sounds like, on something that is completely out of your jurisdiction, something you had little input into, I presume, at least from the testimony this morning we got from the Chief as well as the Assistant Secretary. But they had very little input into this decision, too, about the new criteria.

I presume you haven't had a chance to really review this. Maybe you can't answer the question, but how are we ever going to build a reservoir in the future to both prevent floods or to aid in navigation if the flood waters have to—water has to flow from another State? Won't it be impossible to build a reservoir unless you build it right on the State line?

General GENETTI. Well, it is difficult to speculate, Congressman. There is probably as many other considerations as the new policy considerations that would be potential blocks for any new reservoir in today's environment, not the least of which are environmental considerations, but I believe that the national significance issue is the main issue, and whether the definition comes up to be 50 percent or something else that comes out, the Congress says this is what we think it ought to be defined as. There may well be some in the future. I can't picture any right now or see that.

Mr. MYERS. I guess I would agree with or without the new criteria. Apparently that is true at least under existing conditions today, but it just seems to me that the folly we had this morning, and you missed it, Jim. You got your swing in this afternoon, but everybody got two or three swings this morning at the Chief and the Acting Assistant Secretary. But anyway it just seemed to me it doesn't make any sense at all, the water falls, water doesn't know where it falls, whether it falls in this State or that State, and if we are ever going to control the floods, as an example, the floods in the Midwest back in 1993, we wouldn't have the existing flood control that we do have if we had had this criteria in place.

It just doesn't make any sense. I echo once more what everyone has said here today. The purpose of what we do here is to protect downstream, riparian rights downstream. Of course, we can't use water that falls, so we had to pass it on down to somebody else, but there ought to be a reverse riparian rights also, which leads to my question. You are abdicating, the Corps is abdicating its responsibility to manage rivers, so next year on the Wabash I can just put a pipe in the river and start irrigating because you kind of said you don't have anything to do with the rivers anymore; is that correct or not?

Always before I have been forbidden by law from irrigating, but since the water is flowing right in Indiana, you haven't got anything to say about it. Not all of it, some of it comes from Ohio, but certainly not 50 percent of it comes out of Ohio into the Wabash, so it seems to me using what you have testified here today, I can go to court and say look, they presented that to Congress. This is what they intend to do. How can they prevent me now from pumping water out of there to irrigate my field?

General GENETTI. Sir, I am not really cognizant or familiar with the details of what our new regulatory responsibilities or our authorities would be for that matter, although I understand it would take a number of years for us to transfer it, so I would not suggest you do it next year, but maybe a year or two out, but at this juncture I don't know that we still won't retain some responsibilities as far as regulation of those types of waters.

Now, of course, the other work we are doing on the Wabash probably will be affected certainly by the policy changes.

Mr. MYERS. Well, again, if you are going to do this, it doesn't seem to make any sense to finish engineering if you are never going to build it. I can't understand that kind of thinking, either. I know it is not your policy. It was done by OMB and somebody else, but why finish the engineering and preconstruction work if we are not going to build it?

General GENETTI. Well, sir, the thought is that in many cases much of what will be accomplished, whatever the phase we are in, would have to be accomplished if the local community wants to go forward with it. While there are probably some things that they would not choose to do, many of the things they would have to do anyway, and by completing it at least at that phase they would have the opportunity and then choose to continue on or not under the rules in existence.

Mr. MYERS. Well, I don't know what the Congress is going to do. I have tried to predict in the past what Congress is going to do, not very successfully, but my guess is it is a moot question right now. I think we are talking about what is not probably going to become a reality, at least next year, this year or next year. I have several other questions if we have the time. Mr. Rogers?

IMPACT OF PROPOSED FLOOD CONTROL POLICY

Mr. ROGERS. To follow up on that, Mr. Chairman, very briefly, as I indicated to Mr. Chapman, what happens to Harlan, Kentucky, when you stop building that floodwall and it is 90 percent, the floodwall is 90 percent done, and yet you walk out. Suppose they go out and beg the money and find enough money to buy a gate and put that gate up; is that okay?

General GENETTI. Sir, certainly, I would say it would have to be okay. We would have to—if we turn and walk from Harlan, we would have to do it under a condition that clearly set out what the parameters were for any kind of future work on Harlan.

Mr. ROGERS. Even though you don't pay for a penny of it?

General GENETTI. I mean from the standpoint of providing what we have so that they would be able to use it to continue on with the projects.

Mr. ROGERS. Well, I am trying to ask a theoretical question. I used Harlan as an example, but let's say that this policy goes into effect and you walk away, you are not going to finish these projects. But let's say one of these towns comes up with the money somehow to finish your unfinished project. Since you have walked away from that stream of water, should you have any say-so at all about what they do to protect themselves from the flooding that you said they must do if there is to be flood protection, community, you have got to do it, if it is a local project, you have got to pay for it. Now you are coming along apparently and saying, but wait a minute, we are going to tell you how to do it and approve every inch that you do; is that what you are saying?

General GENETTI. No, sir, not to my understanding. I wanted to distinguish between Section 202 and non-202.

Mr. ROGERS. I mean a regular project.

General GENETTI. In a regular project, no. Whatever phase that we, in fact, quote, "terminate it at," it would be purely up to the local community at that point in time, subject to any other rules and regulations and permits, whether they are State or Federal, unless they were affected likewise.

REGULATORY IMPLICATIONS OF PROPOSED FLOODCONTROL POLICES

Mr. ROGERS. Well, suppose there is a town that is flooding on a non–202 project, your new policy is in effect, the community raises their money and they go out and start building a floodwall and somehow are doing a little bit of interfering with that stream. Maybe putting a floodwall up and constricting the river on to the other bank or whatever. Have you got a right to say, no, you can't do that or to go in and inspect it to approve it?

General GENETTI. Again, sir, as long as it didn't hit any of our responsibilities in a Section 10 or interfere with a wetland or something along that line, I can't see where we would have any responsibility.

Mr. ROGERS. Well, you retain control over all waterways, all streams, don't you?

General GENETTI. We have responsibilities for navigable waters.

Mr. ROGERS. And any waters that feed into a navigable stream, right?

General GENETTI. I believe so, yes, sir.

Mr. ROGERS. So in order to prevent flooding of my town, we want to build a dam on that little creek out there, it is just a little creek, it does flow into the Cumberland, which later flows into the Ohio, but you shouldn't worry too much about that. We just want to dam that thing up and regulate the flood waters. Have you got any problem with that?

General GENETTI. It is unclear to me whether we would have any Section 404 responsibilities.

Mr. ROGERS. What is 404?

General GENETTI. That is principally to do with wetland regulation of fill.

Mr. ROGERS. Not wetlands.

General GENETTI. Well, it is like any dam, reservoir project. There are a number of other agencies that have a part to play, so to say that—we would probably not be the ones to place any criteria in terms of whether you could or could not, other than if we have a regulatory responsibility. Beyond that, it would be up to the other Federal and state agencies.

Mr. ROGERS. By the way, I am just going to make this dam out of dirt. I am not going to put concrete or anything. It is too expensive. I am going to make it as cheap as I can. I am just going to put dirt in there. It may wash out every so often and flood a couple of towns downstream, but that is not my problem. Do you have a problem with that?

General GENETTI. I personally have one, yes.

Mr. ROGERS. I mean does the Corps. The Corps is not going to let me do that, are they? You can't under the law.

General GENETTI. Sir, I am not sure that I am qualified to answer that. We are in a hypothetical area. I have never looked at it, and I have to get you an answer for the record.

Mr. ROGERS. I should have asked the Secretary about that. We do have some folks in the audience that perhaps could respond to that. What do you think about it, general?

General GENEGA. Sir, I think we would have a say-so about the impact of that because the fact is you would be going into navigable waters so we would have a say-so under Section 404 of the Clean Water Act, but the point General Genetti makes about other State requirements and other Federal agency requirements, for example, endangered species and so forth would be applicable.

We would not have, perhaps, the normal say-so that we have through the project authorization process where we determine, for example, how you build it and what you build and we hold ourselves up as the experts in that regard. That piece of it I think we would give up.

Mr. ROGERS. Well, now, would you call this an unfunded mandate?

General GENEGA. Sir, I would understand how it could be perceived as an unfunded mandate.

Mr. ROGERS. Well, as the Chairman says, we are talking about a moot question here, we shouldn't waste too much time on this because it won't happen in a month of Sundays.

Mr. Chairman, I yield back. Before I do, let me thank General Genetti. He and his staff in that Cincinnati office have been so helpful.

Mr. MYERS. They were.

Mr. ROGERS. Have been in the past very helpful.

General GENETTI. Thank you.

Mr. ROGERS. I mean that sincerely.

Mr. MYERS. Mr. Chapman, do you have anything further?

Mr. CHAPMAN. Mr. Chairman, I appreciate the testimony of the general, and I have no further questions.

IMPACT OF PROPOSED FLOOD CONTROL POLICY

Mr. MYERS. Well, as we have questioned here, obviously there is going to be a multitude of problems if we ever do address this problem, ever tried to resolve it. I can see a great many right now.

Communities back home have depended upon the Corps and have met into good faith about starting projects, preconstruction engineering and all the things they have helped pay for and then all of a sudden to have the rug pulled out from underneath them, I am sure there would be many, many problems, if not lawsuits against the Corps of Engineers. For that reason I doubt if this will ever happen, but I have missed the boat before.

Let me give you one example. The Corps of Engineers has been working on a corridor, recreation corridor along the Wabash River in which I have a provincial and a parochial interest both, and one of the projects is in the community of Lafayette to build some cofferdams or wicker dams and flood it for recreational purposes.

Now, all they have to do is enter into agreement under this new criteria that has been established by Office of Management and Budget and the President with this new Reinventing Government, whatever that means, and if this is what it means, I am not too much in favor of it, but all they would have to do is enter into an agreement with the State of Indiana and the local county commissioners, say this is flood control for us because we have been told by the Federal Government that we are responsible for our own flood control, so we are going to build those little wicker dams down there, whatever we want to out of soil, pipe, and gravel, and as long as they said it was flood control, it would seem to me like they would be meeting the criteria that has been established by you and this administration.

I don't know, maybe General Genetti might disagree. We get the two Gs here disagreeing, but I can see where there are just lots and lots of problems. You let local and State governments decide what is flood control. You didn't have a single levee fail in the system in those severe floods we had back in 1993 that was built by the Corps of Engineers. Some were topped and during the process of topping there was some loss, but you had a lot of dams and we are still having dam safety inspections by the Corps of Engineers of dams built by local government and local entities, and you didn't have a single reservoir that failed in that period of time. But if we are going to have everybody building their own, you are going to have a multitude of problems.

It is certainly going to affect navigation, too, so I just don't see where this policy, and this morning the Acting Assistant Secretary said it was pretty much to save money. Well, my mother used to have a saying, "penny wise and pound foolish".

It seems like if you are going to let the local communities build all these, you are going to have some tremendous losses and we aren't going to be able to continue to accomplish the job that we have set out to do through the years. I know it is not your decision to make, but I can see lots and lots of problems. I think Congress should have to take a long hard look at this.

General GENETTI. Yes, sir.

Mr. MYERS. I am preaching. I never got to preach to a two-star general very often. Thank you very much for your testimony this afternoon. We all have other questions that we will provide for the record which are more local in nature, so we will provide those for the record. Thank you very much for your testimony.

[The information follows:]

PROJECT COST REDUCTION

Mr. MYERS. We are pleased that you are aggressively seeking ways to reduce the cost of projects. You indicated that there are four projects that have benefitted from this effort. Which projects are they?

General GENETTI. The four projects for which cost reduction savings have been identified are: Olmsted Locks and Dams, Illinois and Kentucky; McAlpine Locks and Dam, Kentucky and Indiana; Marmet Locks and Dam, West Virginia; Locks and Dams 2, 3, and 4, Monongahela River, Pennsylvania.

Mr. MYERS. You stated that $100,000,000 in cost savings were the result of design changes and contingency adjustments. What are contingency adjustments?

General GENETTI. In the preparation of a project cost estimate, contingency amounts are identified to reflect the uncertainties associated with the design and unit costs of the individual features of a project. As the project design progresses from the generalized feasibility study stage to final plans and specifications, the engineering uncertainties are reduced allowing a more accurate cost estimate to be identified. The contingency adjustments that have been made reflect reduced uncertainty for the four navigation projects resulting from completion of significant design efforts and incorporation of traditional design and construction concepts.

Mr. MYERS. You further indicated that you were expanding your navigation maintenance schedule to include the Mississippi River. Could you please explain what that means?

General GENETTI. Through our partnering efforts, the navigation industry expressed an interest that all districts operating locks on the Ohio and Mississippi systems issue two-year lock closure schedules. This information will assist the navigation industry in planning shipments and associated industries in sizing stockpiles. Previously, Districts in the Ohio River Division have been issuing schedules for the Ohio River system. In the future, two-year lock closure schedules for all locks on the Ohio and Mississippi systems will be included in an annual consolidated Notice to Navigation Interests.

METRO CENTER LEVEE, DAVIDSON COUNTY, TENNESSEE

Mr. MYERS. Why isn't the Metro Center Levee project in Tennessee affected by the proposed policy changes related to Corps participation in flood control projects?

General GENETTI. The Metro Center Levee study meets the nationally significant flood control criteria in that more than 50 percent of water comes from outside of the state. The reconnaissance report will further determine the Federal interest, potential project economics and identification of firm sponsorship to continue into the feasibility phase studies. The reconnaissance phase is scheduled for completion in December 1995.

CARRYOVER OF CONSTRUCTION FUNDS

Mr. MYERS. You state that your large carryover in the construction program is at least partly due to overly optimistic programming. Can you assure us that the program you are proposing for Fiscal Year 1996 is not overly optimistic?

General GENETTI. The budget request for Fiscal Year 1996 has been thoroughly reviewed to identify a realistic program for execution. However, even with the thorough review, uncertainties will still remain due to unexpected weather conditions, delays in real estate acquisition, sponsor financing, etc.

Mr. MYERS. Have the environmental problems that caused work to be delayed been resolved?

General GENETTI. Yes. The delay was associated with resolution of endangered species issues at the Olmsted Locks and Dam project. The issues have been resolved and the National Environmental Protection Act requirements have been completed.

WINFIELD LOCKS AND DAM, WEST VIRGINIA

Mr. MYERS. Please describe for us the negotiated settlement that has been developed for the cleanup of toxic wastes at the Winfield Locks and Dam project in West Virginia.

General GENETTI. The present process of negotiations with American Car and Foundry (ACF), the former owner of the Red House site at the Winfield Lock and Dam project, has resulted in the following offer: ACF has agreed to remediate the contaminated site to meet a standard of dioxin in the soil not to exceed 1 part per billion (1 ppb). This will be accomplished by the excavation of contaminated soils and their testing and transportation by rail car to EPA approved disposal facilities in Utah. Also, ACF agrees to demolish certain obsolete buildings which are not its responsibility under CERCLA liability. In addition to these actions, ACF agrees to pay an additional $2,000,000 toward the Government's past costs and indemnify the United States against liability arising out of ACF's remediation action.

If this agreement would be accepted by the United States, the parties would negotiate a consent decree with the specific terms, lodging the decree with the Federal District Court for a 30 day review period required by a Federal Register Publication process. After opportunity for comment, the decree would be entered into as a final consent decree.

FLOOD CONTROL POLICY

Mr. MYERS. You indicate that the flood control projects in the Ohio River Division have prevented a total of $11.9 billion in damages over the years. Do you happen to know how many of these projects would meet the new criteria being proposed for flood control activities?

General GENETTI. No, sir. Information is not currently available which would permit me to identify those previously constructed projects which would meet these criteria. As you are aware, the new criteria for flood control projects would limit Corps participation to projects of broad national scope and significance. The new criteria require that more than half of the damaging flood water must come from outside the boundaries of the state where damage is occurring, the project must have a benefit-to-cost ratio of 2.0 or greater, and the non-Federal sponsor must be willing and able to pay 75 percent of the first cost of the project.

The proposed criteria requiring that at least 50 percent of the water come from outside the state would have disqualified most of our previously constructed local protection projects as well as a number of our reservoir projects.

Determining whether previously constructed projects could meet the requirement for a ratio of benefits to costs of 2.0 or greater would involve a new economic analysis of each project and this data is not currently available. However, this proposed criteria obviously is stricter than that under which projects were previously authorized and some existing projects possibly could not meet this new criteria for economic justification.

Regarding the criteria that 75 percent of the cost of flood control projects be borne by non-Federal interests, I cannot speculate on how many of our existing projects would have been constructed if this criteria was in effect in the past, but the new criteria obviously places a significantly greater financial burden on local interests.

HAZARD, KENTUCKY

Mr. MYERS. How are the funds provided in Fiscal Year 1995 for the Hazard, Kentucky, project being utilized?

General GENETTI. We are coordinating with the local sponsor concerning the nature of the locally preferred plan. Upon selection of this plan, we will prepare a technical document with engineering appendices and appropriate National Environmental Protection Act documentation to address a locally preferred plan.

KENTUCKY LOCK AND DAM, KENTUCKY

Mr. MYERS. Please provide the Committee with a status report on the Kentucky Lock and Dam, Kentucky, project.

General GENETTI. Fiscal Year 1995 funds are being used for hydraulic modelling, foundations analysis, surveying and mapping, cost reduction studies, and related design efforts.

Washington level review of the project has not been completed and we are currently responding to HQUSACE review comments on the limited reevaluation report.

KNOXVILLE RIVERFRONT, TENNESSEE
AND
HARTSVILLE, TROUSDALE COUNTY, TENNESSEE

Mr. MYERS. How are the funds that were provided for the Knoxville Riverfront, Tennessee, and Hartsville, Trousdale County, Tennessee, studies being utilized?

General GENETTI. Fiscal Year 1995 funds of $168,000 for Knoxville Riverfront and $95,000 for Hartsville, Trousdale County are being used to initiate and complete reconnaissance phase studies to include a master plan for riverfront development at both locations. Additionally, at Knoxville design studies for pavilions, walkway crossings and streambank protection will be included in the master plan. Efforts at both locations were initiated in October 1994 and are scheduled for completion in September 1995.

KANAWHA RIVER NAVIGATION, WEST VIRGINIA

Mr. MYERS. Why have the schedules for completion of the London Interim and Kanawha River, West Virginia, system final reports slipped by one year?

General GENETTI. The London Interim completion date was extended to allow for completion of a full feasibility study. Previous London study efforts were limited due to additional priority work and model studies required to complete the Marmet feasibility study. Marmet is now complete and in the preconstruction engineering and design phase, and work on a full scope feasibility study for London has been resumed. The Kanawha River parent report schedule was also extended to accommodate the later completion of the London study.

ORANGE COUNTY (LOST RIVER), INDIANA

Mr. MYERS. What is the status of the Orange County (Lost River), Indiana, study?

General GENETTI. The reconnaissance study was completed in June 1994. We recommended further studies for French Lick, West Baden Springs, and Orleans under Section 205 of the 1948 Flood Control Act, as amended, of the Continuing Authorities Program. Local interests have decided not to cost-share in additional studies.

OHIO RIVER FLOOD PROTECTION (INDIANA SHORELINE), INDIANA

Mr. MYERS. When will the feasibility cost-sharing agreement for the Ohio River Flood Protection (Indiana Shoreline), Indiana, study be executed?

General GENETTI. The feasibility cost-sharing agreement is scheduled for execution in July 1995.

Mr. MYERS: Will the funds requested for Fiscal Year 1996 be used to initiate the feasibility study?

General GENETTI: Yes, if warranted by the reconnaissance study, the funds requested for Fiscal Year 1996 will be used to initiate the feasibility study.

EAST FORK OF THE LITTLE SANDY RIVER, KENTUCKY

Mr. MYERS. What is the status of the East Fork of the Little Sandy River, Kentucky, study?

General GENETTI. The reconnaissance report which was completed in June 1994 recommended further study under Section 205 of the Continuing Authorities Program for Willard, Kentucky. The local sponsor is now in the process of obtaining funding and a project cooperation agreement is currently being negotiated with the Carter County Fiscal Court.

METROPOLITAN LOUISVILLE, SOUTHWEST, KENTUCKY

Mr. MYERS. When will the feasibility cost-sharing agreement for the Metropolitan Louisville, Southwest, Kentucky, study be executed?

General GENETTI. The feasibility cost-sharing agreement for the Metropolitan Louisville, Southwest, Kentucky, study will be executed in June 1996, if warranted by the reconnaissance report.

Mr. MYERS. When will the feasibility study be initiated?

General GENETTI. The feasibility study will be initiated in July 1996, if warranted.

CONEMAUGH RIVER BASIN, PENNSYLVANIA

Mr. MYERS. What actions have you taken to comply with the direction provided in House Report 103-533 regarding the Conemaugh River Basin, Pennsylvania, project?

General GENETTI. The Fiscal Year 1995 Appropriations Act included $400,000 for the Corps of Engineers to prepare a report as part of the Conemaugh River Basin, Pennsylvania, study. The study will include planning and design features of the "National Park Service and the U.S. Army Corps of Engineers Conemaugh River Greenway Concept Plan" dated March 1994 which can be implemented in conjunction with the proposed major rehabilitation of the Johnstown, Pennsylvania, local protection project. We are complying with this direction and have initiated work on the special report in November 1994 with completion scheduled for November 1995.

Mr. MYERS. When will the feasibility cost-sharing agreement for the Conemaugh River Basin, Pennsylvania, project be executed?

General GENETTI. Funds in the amount of $75,000 are being utilized to develop a conceptual plan for abatement of acid mine discharge at the Webster Mine at Nanty Glo, Pennsylvania. The supplemental report will also include a cost estimate of the proposed remedial measures and benefits associated with the project. A letter of intent to cost share in the feasibility phase has been received from the Cambria County Conservation and Recreation Authority. They continue to have a keen interest in the project and were part of the decision process that zeroed in on the Webster Mine as the site selected for the supplemental report. Should the cost sharing portion of the remedial measures outlined in the report be affordable by the local interests, the feasibility cost sharing agreement can be negotiated by January 1996 and actual feasibility efforts initiated.

METRO CENTER LEVEE, TENNESSEE

Mr. MYERS. What portion of the funds requested for the Metro Center Levee, Tennessee, project will be used to complete the reconnaissance phase of the study?

General GENETTI. Fiscal Year 1995 funds of $335,000 are being used to initiate the reconnaissance phase and $65,000 of the requested Fiscal Year 1996 funds of $400,000 will be used to complete this phase.

MONONGAHELA RIVER COMPREHENSIVE, WEST VIRGINIA

Mr. MYERS. When will the feasibility cost-sharing agreement for the Monongahela River Comprehensive, West Virginia, study be executed?

General GENETTI. It is anticipated that the feasibility cost-sharing agreement will be executed in September 1995.

DAYTON - MIAMI RIVER BASIN, OHIO

Mr. MYERS. What is the status of the Dayton - Miami River Basin, Ohio, study?

General GENETTI. A reconnaissance report was completed in October 1994. There is no Federal interest in further studies at this time since no economically justified flood protection plans could be identified.

OHIO RIVER GREENWAY, INDIANA

Mr. MYERS. How are the funds that were provided in Fiscal Year 1995 for the Ohio River Greenway, Indiana, project being utilized?

General GENETTI. Fiscal Year 1995 funds are being used to initiate schematic design of the project based on the master plan completed in Fiscal Year 1994. A Phase IIA investigation of Hazardous, Toxic and Radiological Wastes is also underway.

WEST VIRGINIA COMPREHENSIVE, WEST VIRGINIA AND WEST VIRGINIA PORT DEVELOPMENT, WEST VIRGINIA

Mr. MYERS. Please provide the Committee with a status report on the West Virginia Comprehensive and West Virginia Port Development projects.

General GENETTI. Three geographic areas are included in the West Virginia Comprehensive Study. In the Parkersburg and Vienna area, we are preparing an Initial Project Management Plan and negotiating a feasibility cost share agreement with the local sponsor. The Huntington District anticipates signing feasibility cost-sharing agreements with Parkersburg and Vienna in April 1995.

At Point Pleasant, a feasibility cost-share agreement was executed on 14 December 1994 and the feasibility study initiated in January 1995.

At Virginia Point in Huntington, West Virginia, the sponsor has requested a delay in the initiation of the study due to lack of funds.

Under the West Virginia Port Development Study, we plan to conduct feasibility studies of potential port sites in the Beach Bottom area of Brooke County, West Virginia, a site at mile 4 of the Little Kanawha River in Wood County, West Virginia, and several sites within the Cabell and Wayne Port District area. A feasibility cost sharing agreement is scheduled to be signed with Cabell and Wayne Counties in March 1995.

METROPOLITAN LOUISVILLE, POND CREEK, KENTUCKY AND METROPOLITAN CINCINNATI, DUCK CREEK, OHIO

Mr. MYERS. What has caused the delay in completion of Preconstruction Engineering and Design for the Metropolitan Louisville, Pond Creek, Kentucky, and the Metropolitan Cincinnati, Duck Creek, Ohio, projects?

General GENETTI. The Chief of Engineers' Reports on both projects were forwarded to Congress in 1994. Authorization was anticipated in the Water Resources Development Act of 1994; however, the Act failed to pass and the project was not authorized. Therefore, Preconstruction Engineering and Design was extended into Fiscal Year 1996 to complete plans and specifications for the initial construction contracts on these projects.

MCALPINE LOCKS AND DAM, INDIANA AND KENTUCKY

Mr. MYERS. Why has the schedule for completion of Preconstruction Engineering and Design for the McAlpine Locks and Dam, Indiana and Kentucky, project slipped two years?

General GENETTI. The PED schedule was extended to continue the site preparation plans and specifications, initiate the plans and specifications for the new lock chamber, and continue additional design efforts to include cost reduction studies.

HOBBS ISLAND, HUNTSVILLE, ALABAMA
AND
HUNTSVILLE SPRING BRANCH, ALABAMA
AND
MUSCLE SHOALS, ALABAMA

Mr. MYERS. Please provide the Committee with a status report on the following studies, which were funded in Fiscal Year 1995: Hobbs Island, Huntsville, Alabama; Huntsville Spring Branch, Alabama and Muscle Shoals, Alabama.

General GENETTI. Hobbs Island is a cigar-shaped island about 2.5 miles long and 0.5 miles wide located in the Tennessee River in northern Alabama. Archaeologists have found evidence that the island was inhabited more than 10,000 years ago by early shell mound builders. The island was continually occupied until about 1400 A.D. and excavations show nine Native American villages dotted the island through the centuries. Today, the most visible legacy of the Native Americans' settlements is a 20-foot high pyramidal earth mound temple that served as their cultural center. A reconnaissance report is underway to determine ways to maintain and exhibit environmental and cultural resources of the area in accord with the Huntsville Master Plan dated June 1991. The reconnaissance report is scheduled for completion in September 1995.

Huntsville Spring Branch drains the bulk of Huntsville, Alabama, through Redstone Arsenal and into Wheeler Reservoir. Trash and debris wash into the branch in urban areas during periods of heavy rainfall. This debris then flows downstream into the backwaters of Wheeler Reservoir and deposits onto both Redstone Arsenal and Wheeler Wildlife Refuge lands. A reconnaissance study is underway to determine possible solutions to environmental problems resulting from Spring Branch flow and is scheduled for completion in September 1995.

Muscle Shoals is located in northern Alabama within the boundaries of the Tennessee River Basin. Muscle Shoals has a population of 10,000 and is experiencing significant growth. Principal flood problems are associated with a large number of sink holes with watersheds ranging from just over 1.5 square miles to about 12 square miles. Rapid growth in the watersheds has caused hydrological changes. In the period between 1990 and 1993, three storms, each exceeding 10 inches of rainfall, fell in the city of Muscle Shoals, with heavy damage to commercial and residential properties. A reconnaissance report was completed in October 1994 and recommended that additional study effort be pursued under Section 205 of the Continuing Authorities Program. The economically justified project is enlargement of a detention pond. A feasibility cost sharing agreement is being negotiated with the City of Muscle Shoals and the feasibility study should begin in March 1995.

LOCKS AND DAMS 2, 3 AND 4, MONONGAHELA RIVER, PENNSYLVANIA

Mr. MYERS. When will the first construction contract for the Locks and Dams 2, 3 and 4, Monongahela River, Pennsylvania, project be awarded?

General GENETTI. The first construction contract was awarded in December 1994 for upgrading the floodway bulkhead at Lock 2.

WINFIELD LOCKS AND DAM, WEST VIRGINIA

Mr. MYERS. The Fiscal Year 1996 program for the Winfield Locks and Dam, West Virginia, project includes $63,870,000 in programmed carryover funds. What is the reason for such a large carryover for this project?

General GENETTI. The carryover is attributed to several items. They include: a six month delay in awarding the $6,015,000 temporary storage building contract due to contractor bid protests; a five month delay in awarding the $112,352,000 lock construction contract due to its linkage with the temporary storage contract; and overly optimistic programming.

Mr. MYERS. What assurances can you give the Committee that you will be able to execute the planned Fiscal Year 1996 program for this project?

General GENETTI. The budget request for Fiscal Year 1996 has been thoroughly reviewed to identify a realistic program for execution. As a result of the review, the Fiscal Year 1996 budget request has been reduced from the Fiscal Years 1994 and 1995 budget requests of $56,500,000 and $51,000,000 respectively, to the Fiscal Year 1996 amount of $11,800,000. Even with the thorough review, uncertainties will still remain due to unexpected weather conditions and resolution and assignment of costs for the excavation and disposal of the contaminated material.

FRANKFORT, SOUTH FRANKFORT, KENTUCKY

Mr. MYERS. Has the local sponsor for the Frankfort, South Frankfort, Kentucky, project acquired the lands for the third construction contract?

General GENETTI. All lands necessary for the third construction have been acquired by the local sponsor.

BARKLEY DAM AND LAKE BARKLEY, KENTUCKY AND TENNESSEE

Mr. MYERS. Who is responsible for operation and maintenance of the Cross Creek National Wildlife Refuge, which is the mitigation component of the Barkley Dam and Lake Barkley, Kentucky and Tennessee, project?

General GENETTI. The U.S. Fish and Wildlife Service has responsibility for operation and maintenance of the Cross Creek National Wildlife Refuge.

Mr. MYERS. Why were Operation and Maintenance funds used for engineering and design of the shoreline treatment measures proposed in the Fiscal Year 1996 Construction, General budget request?

General GENETTI. The Cross Creek National Wildlife Refuge was established by the Corps as mitigation for the Barkley Dam and Lake Barkley project. The reservoir shoreline serves in several areas as a natural levee separating Lake Barkley from the sub-impoundments of the refuge. Continued shoreline erosion will result in the loss of this project mitigation component. The requirement for shoreline protection work was not recognized at the time of initial project construction and will be undertaken in Fiscal Year 1996 to assure integrity of the natural levee. Since the Corps operates and maintains the parent Lake Barkley project, Operation and Maintenance funds were used to determine the scope and cost of the necessary shoreline restoration measures. However, in retrospect, such measures should have been included with the initial project construction and, therefore, are budgeted under the Construction, General account.

DEWEY LAKE, KENTUCKY

Mr. MYERS. The justification sheets for the Dewey Lake, Kentucky, project state that initial funds for engineering and design were programmed to the project in Fiscal Year 1994 from appropriations available for miscellaneous dam safety. Were funds appropriated for "miscellaneous dam safety projects" identified in your budget request?

General GENETTI. In Fiscal Years 1986, 1987 and 1988, Congress appropriated $50,000,000 of Construction, General funds for dam safety assurance new starts which may be approved by the ASA(CW). The Dewey Lake dam safety assurance report was approved by the ASA(CW) on June 23, 1994 and funds were allocated to the project to begin detailed design.

OLMSTED LOCKS AND DAM, ILLINOIS AND KENTUCKY

Mr. MYERS. Please provide for the record a schedule of contracts to be awarded in Fiscal Years 1995 and 1996 for the Olmsted Locks and Dam, Illinois and Kentucky, project.

General GENETTI. The Waterfowl Improvements contract will be awarded in August 1995. The Lock contract is scheduled for award in October 1995. The boat ramp relocation contract is scheduled for award in May 1996.

Mr. MYERS. Please provide the percent complete at the end of Fiscal Year 1995 for each of the project elements currently under construction.

General GENETTI. I will provide for the record the percent complete at the end of Fiscal Year 1995 for each of the project elements currently under construction.

(The information follows:)

ESTIMATED PERCENTAGES COMPLETE AT END OF FISCAL YEAR 1995
FOR SECTION 202 PROJECT ELEMENTS UNDER CONSTRUCTION

Project Element	Percent Complete Fiscal Year 1995
Barbourville, Kentucky :	
Structural	100
Nonstructural	100
Harlan, Kentucky:	
Structural	64
Nonstructural	25
Lower Mingo County, West Virginia (Nonstructural)	20
Matewan, West Virginia (Excluding Hatfield Bottom):	
Structural	68
Nonstructural	100
Matewan, Hatfield Bottom, West Virginia (Nonstructural)	15
Middlesborough, Kentucky:	
Structural	18
Nonstructural	11
Pike County, Kentucky (Nonstructural)	9
Pineville, Kentucky:	
Structural	100
Nonstructural	100
South Williamson, Kentucky:	
Structural	96
Nonstructural	100
Williamsburg, Kentucky:	
Structural	33
Nonstructural	25
Williamson Area, West Virginia:	
Structural	100
Nonstructural	100

Mr. MYERS. Please provide for the record a status report on the Pike County, Kentucky; Williamsburg, Kentucky; Barbourville, Kentucky; Harlan, Kentucky; and Hatfield Bottom, West Virginia, elements of the project.

General GENETTI. I will provide for the record the status of the requested project elements.

(The information follows:)

CURRENT STATUS OF SELECTED SECTION 202 PROJECT ELEMENTS

Pike County, Kentucky - The PCA was executed in October 1994. A landowner's meeting was held in October 1994 to initiate Phase 1 of the four-phase plan. For Phase 1, which includes the Buskirk and McCarr communities, 95 percent of eligible participants have signed up for the voluntary floodproofing and acquisition. Work underway includes certification of applications, title searches, hazardous waste investigations, surveying and monumentation, appraisals, preparation of floodproofing designs, coordination with owners, and solicitation of contractors for floodproofing.

Williamsburg, Kentucky - Structural: The Project Cooperation Agreement has been approved and is scheduled to be executed in March 1995. Plans and specifications are being prepared for the levee/floodwall. Nonstructural: Real estate acquisition and floodproofing efforts will be initiated upon execution of the PCA.

Barbourville, Kentucky - Structural: The levee/floodwall is physically complete. Nonstructural: The nonstructural element is well underway. Out of 58 eligible structures, 17 have been evacuated, and 10 raised or demolished. Carryover funds from Fiscal Year 1994 will be used to complete floodproofing and acquisition of remaining structures in the South Main, Boone Heights and Heidrick areas.

Harlan, Kentucky - Structural: Fiscal Year 1994 carryover funds and Fiscal Year 1995 funds are being used to complete the Phase II, Harlan floodwall contract; initiate construction of the Phase III Loyall diversion; and initiate and complete construction of the Rio Vista sewage collection system. Nonstructural: Work is continuing on Phase II, East Harlan, and Phase IV, Cumberland River area.

Matewan, Hatfield Bottom, West Virginia - Floodproofing of eligible structures was initiated in March 1994 and will be completed in September 1995. Acquisition of eligible structures is scheduled to be initiated in November 1995. The design memorandum on the ringwall is complete. The ringwall construction is scheduled to begin in May 1996.

SOUTHERN WEST VIRGINIA ENVIRONMENTAL RESTORATION INFRASTRUCTURE AND RESOURCE PROTECTION DEVELOPMENT PILOT PROGRAM, WEST VIRGINIA

Mr. MYERS. How are the funds appropriated in Fiscal Year 1995 for the Southern West Virginia Environmental Restoration Infrastructure and Resource Protection Development Pilot Program being utilized?

General GENETTI. Congress appropriated $1,500,000 in the Fiscal Year 1995 Energy and Water Development Appropriation Act. These funds, along with $3,500,000 appropriated in the Fiscal Year 1994 Energy and Water Development Appropriations Act are being used to develop a General Plan and for design/construction of environmental infrastructure projects. A General Plan to identify design and construction assistance projects will be completed in Fiscal Year 1995. The plan includes program procedures, sources of public funding for infrastructure projects, and assessments of the potential for engaging in joint projects between the funding agencies and the Corps. Preparation of a cost sharing agreement for the design of the Summers/ Mercer County Regional Water project is underway. The selection of a second demonstration project is underway. Design of the second project will also be initiated in Fiscal Year 1995. Construction will be initiated on the demonstration projects in Fiscal Year 1996.

SOUTH CENTRAL PENNSYLVANIA ENVIRONMENTAL RESTORATION INFRASTRUCTURE AND RESOURCE PROTECTION DEVELOPMENT PILOT PROGRAM, PENNSYLVANIA

Mr. MYERS. How are the funds appropriated in Fiscal Year 1995 for the South Central Pennsylvania Environmental Restoration Infrastructure and Resource Protection Development Pilot Program, Pennsylvania, being utilized? Are you complying with the direction provided in the House Report 103-135 for this program?

General GENETTI. Congress appropriated $7,000,000 in the Fiscal Year 1995 Energy and Water Development Appropriation Act. These funds, along with $10,000,000 included in the Fiscal Year 1994 Energy and Water Development Appropriations Act are being used to provide wastewater treatment plants for the Forest Hills Municipal Authority and Altoona City Authority in compliance with House Report 103-135.

SALYERSVILLE, KENTUCKY

Mr. MYERS. What is the status of the Salyersville, Kentucky, project?

General GENETTI. The Project Cooperation Agreement (PCA) is scheduled for execution this fiscal year. Real estate acquisition by the local sponsor is scheduled to begin after execution of the PCA. Preparation of project plans and specifications continues.

PORTSMOUTH HARBOR, OHIO

Mr. MYERS. Please describe the work that will be performed at the Portsmouth Harbor, Ohio, project in Fiscal Year 1996.

General GENETTI. The Fiscal Year 1996 budget request of $75,000 will be used to perform maintenance dredging of the harbor access channel.

Mr. MYERS. Is Portsmouth Harbor a commercial harbor?

General GENETTI. No, Portsmouth Harbor is not a commercial harbor.

SALAMONIE LAKE, INDIANA

Mr. MYERS. Why is an historic preservation management plan required for the Salamonie Lake, Indiana, project?

General GENETTI: Section 110 of the National Historic Preservation Act of 1966, as amended, directs Federal agencies to establish a historic preservation program for properties under their jurisdiction, and requires Federal agencies to integrate historic preservation concerns into agency plans and programs. Accordingly, the Corps has an ongoing program to identify, evaluate, protect, preserve, and manage historic properties located on civil works water resource project lands. Fiscal Year 1996 is the year that Salamonie Lake is scheduled for participation in this program.

KENTUCKY RIVER LOCKS AND DAMS 5 - 14, KENTUCKY

Mr. MYERS. What is the status of your efforts to transfer the Kentucky River Locks and Dams 5 - 14 to the Commonwealth of Kentucky?

General GENETTI. The Corps is continuing to undertake critical maintenance repairs to safeguard the water supply function of the dams on the Kentucky River. The Corps, in conjunction with Commonwealth of Kentucky officials, developed a prioritized list of repairs which relate to water supply. This work was divided into three contracts. Work included in the initial contract was completed in October 1994. Work included in the second contract is currently scheduled for completion in May 1995. The third contract is currently scheduled for award in April 1995 and completion in December 1995. During construction of repairs by the Corps, it was determined that additional funding beyond the $10,000,000 previously made available for this project would be required to complete remaining priority list water supply repairs, including work at Dams 11 and 14. In addition to the water supply repairs, the Commonwealth of Kentucky has identified additional unfunded repair work at Dams 12 and 13. The Corps will complete critical water supply repairs originally identified on the priority list subject to availability of funds. It is anticipated that facilities will be transferred to Kentucky upon completion of necessary maintenance repairs. Nevertheless, the Administration has identified economic and policy concerns with accomplishing this work.

WABASH RIVER, MIDDLE REACHES, GREENFIELD BAYOU, INDIANA

Mr. MYERS. Your 1996 budget request includes $153,000 in new money to complete the feasibility study on the Greenfield Bayou project in Vigo County, Indiana. The study is to be completed in September of 1996. As the feasibility study is investigating a dual project for an agricultural levee and environmental restoration, what impact will the new Corps policy on flood control projects have on this project?

General GENETTI. During completion of the current phase of each study or project a determination will be made as to whether it meets the "nationally significant" criteria will be made. In the case of ongoing feasibility studies for flood control projects where a non-federal sponsor has contributed funds, we will be working with each sponsor to determine their wishes on whether to proceed with the cost-shared study or terminate the study. The Wabash River Basin Comprehensive, Indiana, which includes both flood control and environmental restoration features, completes the feasibility phase in Fiscal Year 1996 and will require further review to determine what, if any, environmental restoration features we could proceed with. Currently, this study does not meet the new flood control criteria and will not proceed into the Preconstruction Engineering and Design phase. The environmental restoration portion of the project could possibly continue to qualify for funding under separate environmental budget initiatives.

Mr. MYERS. What do you assume will be in the Fiscal Year 1997 budget for this project?

General GENETTI. Currently the Wabash River Basin will not be included in the Fiscal Year 1997 budget request for flood control. We are uncertain as to whether or not Preconstruction Engineering and Design for the environmental restoration components will continue.

INDIANAPOLIS, WHITE RIVER (NORTH), INDIANA

Mr. MYERS. Your budget request contains $55,000 to complete the feasibility study of the Indianapolis North flood control project. Knowing that the project would not meet your new criteria for flood control projects because it is not an "interstate" project, do you plan to proceed with the next phase of the project in 1997?

General GENETTI. No. We would not proceed into the Preconstruction Engineering and Design phase.

Mr. MYERS. If not, why are you proposing to continue the feasibility study in 1996 and thereby forcing the local sponsor to continue contributing money to a project that will, under the new Corps's policy, not go forward? The feasibility study on this project is $900,000 Federal and $900,000 local.

General GENETTI. In the case of ongoing feasibility studies for flood control projects where a non-Federal sponsor has contributed funds, we will be working with each sponsor to determine their wishes on whether to proceed with the cost-shared study or terminate the study. We would not force the project sponsor to continue participating in the feasibility study. They could terminate their relationship with the Federal government in accordance with the terms of the feasibility cost-sharing agreement.

FEATHER CREEK, CLINTON COUNTY, INDIANA

Mr. MYERS. How will the Corps' proposed policy for flood control projects impact Continuing Authorities projects in the Ohio River Division in 1996? For instance, we have finally started the plans and specifications for Feather Creek, which is funded under the Section 205 Continuing Authorities Program. Will that project move forward to construction or will it be caught in the prohibition on flood control projects?

General GENETTI. The Feather Creek project will proceed as normal since it is currently underway. Plans and specifications are scheduled for completion in October 1995 and construction is expected to be initiated in Fiscal Year 1997.

MCALPINE LOCKS AND DAM, INDIANA AND KENTUCKY

Mr. MYERS. Your budget request includes $1,400,000 in new dollars, to supplement $630,000 in 1995 carryover funds, for the McAlpine Lock and Dam project. The funding is to be used to continue PED. Would you be able to utilize construction funds if they were provided to you? How would they be spent?

General GENETTI. McAlpine Locks and Dam project is in the Fiscal Year 1996 budget to continue PED; therefore, we do not have an approved capability to initiate construction. However, in addition to the budgeted PED funds, construction funds in the amount of $2,000,000 could be used in Fiscal Year 1996 to award a contract to initiate construction of wharf improvements, resident engineer construction office, and related buildings which support the larger lock replacement contract.

OLMSTED LOCKS AND DAM, ILLINOIS AND KENTUCKY

Mr. MYERS. You propose to carryover $23,000,000 for construction at Olmsted from 1995 to 1996. From 1994 to 1995 you carried over more than $42,000,000 for this project. What is the reason for these large carryovers?

General GENETTI. In addition to overly optimistic programming, there are several reasons for the large carryover on the Olmsted Locks and Dam project. The contract award for the $54,400,000 lock cofferdam project was delayed five months to resolve environmental issues. This resulted in significant carryover into Fiscal Year 1994. In Fiscal Year 1994, unusual weather and river conditions resulted in 173 days delay.

Mr. MYERS. You mention in your testimony that your construction carryovers from 1995 to 1996 are due to "overly optimistic programming." Exactly what does this mean?

General GENETTI. By "overly optimistic programming" it is meant that the amount of funds expected to be required does not appropriately incorporate unanticipated problems in local sponsor financing, real estate acquisition, environmental issues, design concerns, contract bid protests, etc. which frustrate the optimism inherent in project schedules.

FLOOD CONTROL POLICY

Mr. MYERS. As the Corps request assumes a large decrease in flood control planning, design, and construction activities, what impact will this have on your division?

General GENETTI. The workload associated with flood control activities would decrease over time under the Administration's new policy for flood control. Commensurately manpower associated with flood control activities would be adjusted downward to reflect the smaller workload. A more detailed and specific analysis of these potential impacts must await further clarification and guidance from HQUSACE on how the new policy will specifically be applied.

Mr. MYERS. Operations and maintenance would still be a Corps activity under this proposal. What percentage of your budget are O&M activities?

General GENETTI. The Operation and Maintenance budget request of $240,682,000 represents 70 percent of our Fiscal Year 1996 budget request.

WABASH RIVER, SCENIC CORRIDOR, INDIANA

Mr. MYERS. Please update the subcommittee on how you spent the $100,000 provided to you in 1995 for the Wabash Scenic Corridor. While additional funding is not in your request, what activities could be undertaken in 1996 with similar funding?

General GENETTI. Fiscal Year 1995 funds are being used to continue detailed planning for a bike/hike trail along the Wabash River in the vicinity of West Lafayette, Indiana, and to initiate detailed planning for a riverside park at Covington in Fountain County, Indiana. Similar funding in Fiscal Year 1996 would allow this work to continue along the existing corridor and extend service to additional areas in Fountain County.

INDIANAPOLIS CENTRAL WATERFRONT, INDIANA

Mr. MYERS: What are your plans for the $4,000,000 that was appropriated for the Indianapolis Central Waterfront project in 1995?

General GENETTI. Fiscal Year 1995 funds are being used to prepare construction documents for the Capital City Landing, an estimated $20,000,000 project. In addition, design work will continue on the river edge improvements immediately upstream of the Capital City Landing and development of the upper canal to I-65.

Mr. MYERS. Will you be able to construct any of the features recommended in the Corps' 1993 report on the project?

General GENETTI. Federal construction of these improvements is not anticipated at this time.

KENTUCKY LOCK ADDITION, KENTUCKY

Mr. MYERS. Why have you requested no funding for the Kentucky Lock Addition in your budget?

General GENETTI. This project is not yet authorized for construction and Washington level review of the project has not been completed.

CECIL M. HARDEN LAKE, INDIANA

Mr. MYERS. Of the $762,000 requested for Operation and Maintenance at C.M. Harden, how much, if anything, would be used to continue the rip rap placement at the lake?

General GENETTI. Approximately $31,000 will be used for rip rap supply in Fiscal Year 1996.

Mr. MYERS. The local community has contacted me to say that the Corps' trucks have damaged roads while transporting this rip rap to placement sites. Could you comment on that for the record?

General GENETTI. Parke County officials allege that transportation of rip rap by contractor vehicles has caused approximately $80,000 worth of damage to several roads. The Corps has not accepted liability for any alleged damages; however, the Corps intends to clear future shipment schedules with Parke County officials before transportation occurs to insure that the most desirable routes are used.

CONTINUING AUTHORITIES PROJECTS IN INDIANA

Mr. MYERS. Please update the subcommittee on the following projects: Section 205 project at Ellettsville, Indiana; Section 14 projects in Morgan County, Indiana; and Orange County, Indiana.

General GENETTI. I will provide the status of these projects for the record.

(The information follows:)

Jacks Defeat Creek, Ellettsville, Indiana: Completion of the reconnaissance study is scheduled for February 1995. An economically feasible levee project has been identified. The sponsor wishes to defer the project at this time due to other ongoing infrastructure project costs.

White River, Blue Bluff Road, Morgan County: Planning and design analysis is underway and scheduled for completion in March 1995. A contract is to be awarded in July 1995 and construction is scheduled for completion in December 1995.

White River, Bottom Road, Morgan County: Planning and design analysis is underway and scheduled for completion in April 1995. A contract is to be awarded in July 1995 and construction is scheduled for completion in January 1996.

White River, Henderson Ford Road, Morgan County: Planning and design analysis is underway and scheduled for completion in April 1995. Contract is to be awarded in July 1995 and construction is scheduled for completion in January 1996.

Orange County, Indiana: This study has been terminated since the local sponsor has decided not to cost share additional efforts.

WABASH RIVER, NEW HARMONY, INDIANA

Mr. MYERS. This subcommittee provided $200,000 for a general investigation at New Harmony in 1995. No followup funding is included in your request. How were the 1995 monies spent?

General GENETTI: Fiscal Year 1995 funds are being used to initiate a feasibility phase study of streambank erosion problems along the Wabash River in New Harmony.

Mr. MYERS. What activities could be undertaken in 1996?

General GENETTI. In Fiscal Year 1996, we intend to complete the feasibility study including compliance with the National Environmental Protection and National Historical Preservation Acts.

Mr. MYERS. Why was no recommendation made for 1996 dollars?

General GENETTI. Fiscal Year 1995 carryover funds will be sufficient for activities planned for Fiscal Year 1996. If a Federal interest is identified, funds will be requested to initiate Preconstruction Engineering and Design in Fiscal Year 1997.

OHIO RIVER GREENWAY, INDIANA

Mr. MYERS. How was the $500,000 in 1995 for the Ohio River Greenway project utilized?

General GENETTI: Fiscal Year 1995 funds of $500,000 are being used to initiate a schematic design of the project based on the master plan completed in Fiscal Year 1994. A Phase IIA investigation of Hazardous, Toxic and Radiological Wastes is also underway.

Mr. MYERS. What activities could you undertake in 1996?

General GENETTI. We do not have an approved capability because the outputs of this study are recreational and not in accordance with Administration priorities. However, Fiscal Year 1996 funds could be used for a variety of work items including additional design, construction document preparation, and initiation of National Environmental Protection Act documentation.

TUESDAY, FEBRUARY 21, 1995.

MISSOURI RIVER DIVISION

WITNESSES

COL. MICHAEL F. THUSS, DIVISION ENGINEER
JOSEPH J. GRASSO, DIRECTOR OF ENGINEERING AND TECHNICAL SERVICES
GARY ERICKSON, DIRECTOR OF PROGRAMS MANAGEMENT
RONALD G. DODSON, CIVIL WORKS PROGRAMS MANAGEMENT DIVISION

INTRODUCTION

Mr. MYERS. Next, we will have the Missouri River Division. The Colonel is here.

Colonel Thuss, the committee is pleased to welcome you. This is your first appearance here. Your biography will be included in the record and your prepared statement will be included in the record, and we will be pleased to hear you at this time.

Colonel THUSS. Thank you, sir. Mr. Chairman, distinguished members of the committee, I am privileged to be here today to report on the civil works activities of the Missouri River Division. I have with me today to my right Mr. Joe Grasso, who is my Director of Engineering, and to my left Mr. Gary Erickson, who is my Director of Programs Management.

I would also like to single out today for some special recognition, because he is the one who really pulls all this together for me and hardly ever gets any recognition, the person sitting at the end of the table, Mr. Ron Dodson, who I really appreciate because he has helped so much as a member of the team.

Mr. MYERS. Welcome.

Colonel THUSS. Mr. Chairman, with your permission I would like to submit my status report for the record and give you a brief summary.

Mr. MYERS. The committee would be pleased to hear your summary.

[The information follows:]

STATUS REPORT ON CIVIL WORKS ACTIVITIES IN THE MISSOURI RIVER DIVISION

FISCAL YEAR 1996

COLONEL MICHAEL F. THUSS, DIVISION ENGINEER

Mr. Chairman, distinguished members of the Committee, I am privileged to report on the civil works activities of the Missouri River Division. Assisting me today: Mr. Joseph Grasso, Director of Engineering; Mr. Gary Erickson, Director of Programs Management; and his assistant for Civil Works, Mr. Ronald Dodson.

DIVISION AREA

The Division headquarters is in Omaha, Nebraska, with district offices in Omaha and in Kansas City, Missouri.

RECOVERY FROM THE FLOOD OF 1993

Last year we reported on the ravages of the Midwest Flood of 1993 and the measures taken in the Missouri River Division to provide rehabilitation assistance. Because of the magnitude of damage, especially to non-Federal levees, significant resources of the Division were devoted to continuing assistance through FY94 and into FY95.

We have completed repairs on all but eight of 85 non-Federal levees, at a cost of nearly $24 million. Forty-four Federal levees have been repaired, at a cost of nearly $30 million. In this single flood event, our levees, together with our dam and reservoir projects, prevented an estimated $11 billion in flood damages. This is nearly three times as much as the cost of their construction and maintenance.

FISCAL YEAR 1996 BUDGET REQUEST

Looking now to the FY96 budget, the Missouri River Division request is $2.3 million for General Investigations, $15.6 million for Construction General, and $92.5 million for Operation and Maintenance. Amounts requested for General Investigations and Construction General are reduced from requests of recent years, which were based upon schedules which I have found to be overly optimistic. Our execution in FY94, for example, was considerably less than programmed. We expended only 81 percent and 64 percent of funds available for General Investigations and Construction General, respectively. For General Investigations, our FY94 expenditures were affected by our flood recovery operations. Our FY95 and FY96 programs reflect new starts that were deferred because of that effort, but are in line with prior year expenditures. For Construction General, our schedule for FY95 also reflects an amount more in line with expenditures of recent years. The carryover into FY96, which assisted us in reducing our request, will help fund a program boosted by significant construction efforts on Blue River Channel and extensive land acquisition on Missouri River Fish and Wildlife Mitigation.

The more realistic funding schedules developed for FY95 and beyond are achievable. We are demonstrating our commitment to meeting these schedules by making their achievement a part of individual performance standards for me and my staff.

We have absolute assurance from HQUSACE that, in the event we expend funds faster than our historical pattern, they will reprogram unobligated funds to cover our awards and contractor earnings. We have notified our sponsors of our spending patterns and the impacts on their projects.

GENERAL INVESTIGATIONS

The funds requested for General Investigations will be used to start one study, continue eight, and complete one. We will begin preconstruction engineering and design on one project and continue on three. I will comment on just a few of these.

SALINA, KANSAS

At Salina, Kansas, a Federal project was completed in 1967, but recent investigation by the city revealed that portions of the levee would now be overtopped by a 100-year flood event. Large residential areas and two light industrial parks provide great potential for economic and human loss.

TOPEKA, KANSAS

A similar situation exists at Topeka, Kansas, where a flood protection project was completed by the Corps in 1974. These levees protect industrial-commercial and residential development from flooding by the Kansas River. The levee design was based on river flows reduced by proposed upstream reservoirs. Because several of these reservoirs were never constructed, actual flows exceed design flows. Our study will determine if there is economic justification for modifying the project.

LOWER PLATTE RIVER AND TRIBUTARIES, NEBRASKA

Another continuing study is the Lower Platte River and Tributaries in Nebraska. There are 13 existing flood damage prevention projects in the study area. The devastating flood of March 1993 demonstrated the value of these projects; but in unprotected areas, two lives were lost and property damage was more than $25 million.

MISSOURI RIVER LEVEE SYSTEM
UNITS L455 AND R460-471, MISSOURI AND KANSAS

Along the Missouri River, the Midwest Flood of 1993 tested our existing levee projects severely. At St. Joseph, Missouri, our levee prevented an estimated $176 million in damages; but flood waters were within inches of the top Across the river at Elwood and Wathena, Kansas, the levee was overtopped; and flooding caused damages of over $65 million.

TURKEY CREEK BASIN, KANSAS AND MISSOURI

The Turkey Creek Basin in Kansas City was hard hit by the 1993 flood. Our feasibility study will be completed in FY96. Likely solutions to the problem include tributary storm water diversion and channel modification.

WOOD RIVER, GRAND ISLAND, NEBRASKA

Funds provided for FY96 will allow us to continue preconstruction engineering and design on the Wood River project at Grand Island, Nebraska. The flood of record caused damage estimated at over $13 million. The project plan consists of a channel to divert flood flows from Wood River into the nearby Platte River.

BIG SIOUX RIVER, SIOUX FALLS, SOUTH DAKOTA

Preconstruction engineering and design will continue on the Big Sioux River at Sioux Falls, South Dakota. The project plan modifies a Federal project completed in 1965 and will improve bridges, raise levees, raise a diversion dam, and modify the existing chute and stilling basin..

CONSTRUCTION, GENERAL

Our Construction General program consists of five continuing projects, for which we are requesting $15.6 million in FY96. I will comment briefly on several of these projects.

MISSOURI RIVER FISH AND WILDLIFE MITIGATION IOWA, NEBRASKA, KANSAS, AND MISSOURI

The Missouri River Fish and Wildlife Mitigation project mitigates losses to fish and wildlife resulting from construction and operation of the Missouri River Bank Stabilization and Navigation Project. The mitigation consists of habitat development on nearly 17,000 acres of public lands, and acquisition and habitat development of nearly 30,000 acres of private land. We have acquired more than 8,500 acres at 8 sites and awarded contracts on 3 sites, one of which is completed. Funds requested for FY96 will be used to continue land acquisition from willing sellers, initiate habitat development on 4 sites, and complete 5 sites.

PERRY CREEK, IOWA

The project at Perry Creek, Iowa, will enlarge the existing channel and conduit through Sioux City and install a basin-wide flood warning system. The flood problem is severe under the present stage of urban development. The improved channel and new stilling basin will provide capacity for a 100-year flood.

BLUE RIVER CHANNEL, KANSAS CITY, MISSOURI

The Blue River Channel project in Kansas City, Missouri, consists of 12.5 miles of channel alterations and bridge modifications. A completed reach of the project successfully carried the flood waters of 1993. The program request for FY96 will be used to continue relocation of railroads and construction of the channel.

OPERATION AND MAINTENANCE, GENERAL

Our Operation and Maintenance program for FY96 is $92.5 million. Requested funds will support a variety of vital operation and maintenance activities, including the Master Water Control Manual Update, for which the Draft Environmental Impact Statement was distributed to the public last summer. The draft included identification of impacts associated with a preferred water control plan alternative. In all, about 4,500 people attended public workshops; and we received testimony from about 625 people at 26 sites. In view of the wide interest in the draft, I extended the public comment period to March 1st of this year. The decision on any further study will be made after all comments are received and considered. Under the current schedule, the earliest any change in the operation of the system would take place is the spring of 1997.

MINORITY CONTRACTING

Before closing, I would like to add a note about minority contracting in Missouri River Division. During FY94 we awarded $54.7 million to small and disadvantaged business firms. This amounted to almost 7 percent of our total obligations of more than $800 million, but was shy of the assigned goal of 8 percent. With additional emphasis on the program, we project reaching the 8 percent goal in FY95.

CONCLUSION

Missouri River Division has a proud history of accomplishment. We look forward with confidence to the challenges of our evolving role in the future.

Mr. Chairman, members of the Committee, this completes my report.

US Army Corps
of Engineers
Missouri River Division

Biography

Colonel Michael F. Thuss

Colonel Michael F. Thuss is Commander and Division Engineer of the Missouri River Division of the U.S. Army Corps of Engineers, headquartered in Omaha, Nebraska. He is responsible for leading a major military design and construction program across 11 states and Federal water resources and regulatory programs in 10 states. He also leads a national $600 million program in support of the Department of Defense, Environmental Protection Agency and other Federal agencies for the cleanup of hazardous, toxic and radioactive waste. He assumed command in August 1994.

Colonel Thuss' responsibilities include water management within the Missouri River basin including flood control, wetlands, navigation, irrigation, hydropower production, water supply, recreation, and fish and wildlife. Major military design and construction programs support the active and reserve components of the Army and Air Force throughout the region. The Kansas City and Omaha Districts report directly to him.

Prior to his move to Omaha, Colonel Thuss served as the U.S. Forces Korea Staff Engineer and the Eighth Army Engineer from 1992 to 1994. He was Commander of the Corps of Engineers' Mobile District in Mobile, Alabama, from 1990 to 1992. Before moving to the Mobile District, he was Assistant Director of Civil Works for the Western and Pacific Regions in the Headquarters Army Corps of Engineers in Washington, D.C.

Colonel Thuss' other command assignments include the Recruiting Battalion in San Antonio, Texas; 62d Combat Engineer Battalion (Heavy) at Fort Hood, Texas; and Headquarters and Bravo companies with the 299th Combat Engineer Battalion in Vietnam.

He also served in key staff positions with increasing responsibilities as Communications and Electronics Officer at Fort Riley, Kansas; Housing Officer and Assistant to the Commandant of the Army War College at Carlisle Barracks, Pennsylvania; project officer for the Corps' Los Angeles District at Fort Huachuca and Tucson, Arizona; and battalion Executive Officer and Operations Officer at Karlsruhe, Germany.

A 1989 graduate of the National War College, Colonel Thuss earned a Master of Military Arts and Sciences degree from the Army Command and General Staff College in 1980 and a Master of Science in Civil Engineering from the University of California at Berkeley in 1975. He was awarded a Bachelor of Science from the U.S. Military Academy at West Point in 1968 and graduated from the Engineer and Infantry Officers Advance Courses and the Communications and Electronics Officers Basic Course.

Colonel Thuss is a registered professional engineer in Texas.

His awards include the Defense Superior Service Medal, the Legion of Merit with Oak Leaf Cluster, the Bronze Star with Oak Leaf Cluster, the Meritorious Service Medal with three Oak Leaf Clusters, and the Army Achievement Medal. He also received Certificates of Achievement for his water resources work from the Governors of Georgia, Alabama, and Florida. In addition, he was made an Honorary Citizen of Tuscson, Arizona, by the mayor and city council for his water resources work in the region.

Colonel Thuss and his wife, Patty, have two children. Jenny attends Texas A&M University. Dan is a senior in high school.

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For Construction General our schedule for fiscal year 1995 also reflects an amount more in line with expenditures of recent years. The carryover into fiscal year 1996, which assisted us in reducing our request, will help fund a program boosted by significant construction efforts on Blue River Channel and extensive land acquisitions on the Missouri River Fish and Wildlife Mitigation project.

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Our Operation and Maintenance program for fiscal year 1996 is $92,500,000. Requested funds will support a variety of vital operation and maintenance activities, including the Master Water Control Manual Update. The Draft Environmental Impact Statement was distributed to the public last summer. The draft included identification of impacts with a preferred water control plan. In all, about 4,500 people attended public workshops; and we received testimony from about 625 people at 26 sites.

In view of the wide interest in the draft, I extended the public comment period until 1 March of this year. The decision on any further study will be made after all comments are received and considered. Under the current schedule, the earliest any change would take place is the spring of 1997.

CONCLUSION

The Missouri River Division has a proud history of accomplishment. We look forward with confidence to the challenges of our evolving role in the future.

Mr. Chairman and members of the committee, this completes my report.

[CLERKS NOTE:—The justification sheets for the Missouri River Division follow:]

Justification of Estimates for Civil Functions Activities
Department of the Army, Corps of Engineers
Fiscal Year 1996

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6 February 1995

Justification of Estimates for Civil Functions Activities
Department of the Army

Summary Missouri River Division

	FY 1995 Allocations $	FY 1996 Request $	Increase or Decrease $
General Investigations			
Surveys	1,163,000	1,721,000	578,000
Preconstruction Engineering and Design	620,000	620,000	0
Subtotal, General Investigations	(1,783,000)	(2,341,000)	(578,000)
Construction, General			
Construction	24,860,000	15,613,000	-9,247,000
Major Rehabilitation	0	0	0
Dam Safety Assurance	0	0	0
Subtotal, Construction, General	(24,860,000)	(15,613,000)	(-9,247,000)
Operation and Maintenance, General			
Project Operation	57,280,000	56,785,000	-495,000
Project Maintenance	30,176,000	35,672,000	5,496,000
Subtotal, Operation and Maintenance	(87,456,000	(92,457,000	(5,001,000)
	============	============	============
TOTAL, MISSOURI RIVER DIVISION	114,099,000	110,411,000	-3,668,000

APPROPRIATION TITLE: General Investigations, Fiscal Year 1996 | Missouri River Division

Study	Total Estimated Federal Cost $	Allocation Prior To FY 1995 $	Tentative Allocation FY 1995 $	Allocation FY 1996 $	Additional To Complete After FY 1996 $
1. SURVEYS - NEW:					
a. Navigation Studies: None.					
b. Flood Damage Prevention: None.					
c. Shoreline Protection Studies: None.					
d. Special Studies: None.					
e. Comprehensive Studies: None.					
f. Review of Deferred Projects: None					

Study	Total Estimated Federal Cost $	Allocation Prior To FY 1995 $	Tentative Allocation FY 1995 $	Allocation FY 1996 $	Additional To Complete After FY 1996 $
1g. Review of Completed Projects: An amount of $100,000 is requested to initiated one study.					
KANSAS:					
Wilson Lake	160,000	0	0[1]	100,000	60,000

Wilson Lake, Kansas, was authorized by the Flood Control Act approved 22 December 1944, as modified by subsequent acts. Construction began in April 1961, and the project was placed in operation in December 1964. The dam is located on the Saline River in Russell County, Kansas, about 50 miles west of Salina, 10 miles north of Wilson, and 20 miles east of Russell, Kansas. Wilson Lake provides flood control storage and multipurpose storage for irrigation, navigation, and low-flow regulation.

The Kansas Water Office's letter dated 11 May 1993 requested a reallocation study at Wilson Lake for potential water supply storage for the cities of Hays and Russell, Kansas. The two cities have indicated a need for additional water supply sources and a desire to utilize Wilson Lake. Viable alternatives for dependable water supply are no longer available from traditional sources, based upon information provided by both the cities and the Kansas Water Office. Non-traditional sources must be evaluated in order to ensure that all alternatives have been considered before decisions are made that could dramatically affect existing water usage or potential growth for the region. The reconnaissance study will evaluate the technical aspects associated with a potential water supply reallocation for Wilson Lake compared to other alternatives for water supply for the region. The likely result of the reconnaissance phase study is a recommendation for reallocation of existing storage that would increase vendable outputs at no construction cost to the Federal government, which is in accord with Administration policy. An Initial Appraisal Report, approved in November 1993, documents the potential for reallocation at Wilson Lake and recommends further study. The Kansas Water Office and the cities of Hays and Russell, Kansas, are aware of the feasibility cost sharing requirements.

Fiscal Year 1996 funds will be used to initiate the reconnaissance phase of the study at full Federal expense. The reconnaissance study is scheduled for completion in January 1997, which is 12 months after initiation.

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[1] Funds allocated for Fiscal Year 1995 were reprogrammed. (Reevaluation of the district's overall capability in the General Investigations program indicated the necessity of delaying initiation until Fiscal Year 1996.)

Study	Total Estimated Federal Cost $	Allocation Prior To FY 1995 $	Tentative Allocation FY 1995 $	Allocation FY 1996 $	Additional To Complete After FY 1996 $
2. SURVEYS - CONTINUING:					
a. Navigation Studies: None.					
b. Flood Damage Prevention Studies: The amount of $786,000 is requested to continue four studies in FY 1996.					
KANSAS					
Turkey Creek Basin, KS and MO	1,720,000	1,303,000	306,000	111,000	0

The Turkey Creek basin is a 23-square-mile area within Kansas City, Missouri; Kansas City, Kansas; and suburbs in Johnson and Wyandotte Counties. Turkey Creek flows into the Kansas River just 3 miles upstream from the confluence of the Kansas and Missouri Rivers. The basin is nearly 100 percent urbanized, and a significant amount of development exists in the flood plain. A dual flood threat exists in the study area which consists of Turkey Creek overbank flows and localized hillside runoff. Either flood source can cause considerable damage. Floods inundate highly developed areas along Southwest Boulevard and in the Central Industrial District in Kansas City, Missouri, as well as in Kansas City, Kansas. Five damaging floods have occurred since 1977, and there is a high level of concern by local interests. The flood of record occurred in July 1993, causing one fatality and damages estimated at $20 million. Study sponsors are the cities of Kansas City, Kansas, and Kansas City, Missouri. A modification to the feasibility cost sharing agreement (FCSA) was signed on 20 October 1992. A second modification to the FCSA is scheduled for May 1995.

Fiscal Year 1995 funds will be used to continue the cost-shared feasibility study. The funds requested for FY 1996 will be used to complete the feasibility study. The estimated cost of the feasibility phase is $2,800,000, which is being shared on a 50-50 percent basis by Federal and non-Federal interests. Up to one-half of the non-Federal share may be in-kind services. A summary of study cost sharing is as follows:

Total Estimated Study Cost	$3,120,000
Reconnaissance Phase (Federal)	320,000
Feasibility Phase (Federal)	1,400,000
Feasibility Phase (Non-Federal)	1,400,000

The reconnaissance phase was completed in February 1989. The feasibility study is scheduled for completion in September 1996.

Study	Total Estimated Federal Cost $	Allocation Prior To FY 1995 $	Tentative Allocation FY 1995 $	Allocation FY 1996 $	Additional To Complete After FY 1996 $
2b. Flood Damage Prevention Studies (Continued)					
MISSOURI					
Swope Park Industrial Area, Kansas City	585,000	0[1]	90,000	144,000	351,000

The Blue River drains a 272 square-mile area, much of which is a highly urbanized part of the Kansas City Metropolitan Region. About 56 percent of the basin lies in Johnson County, Kansas, and the remainder is in Cass and Jackson Counties, Missouri. Flooding has been a major problem in the basin for many years. A channel modification project is currently under construction on the 12-mile reach approaching the Missouri River.

A serious flood problem remains along the Blue River upstream of 63rd Street. A reconnaissance study of the Blue River Basin was completed in May 1987 and recommended that feasibility investigations be undertaken for the Nall Hills area of Overland Park, Kansas, and the Dodson Industrial Area of Kansas City, Missouri. The Swope Park Industrial Area was studied during the Blue River Basin, Kansas and Missouri, Reconnaissance Study, but no economically justified plan was identified at that time. However, the May 1990 flood brought higher water surface elevations along the river than were anticipated, causing damages to the Swope Park Industrial Area in excess of $500,000. Subsequent evaluation indicated an increased potential for an economically justified flood control plan. The city of Kansas City, Missouri, the likely sponsor, requested a restudy of the area by letter dated 31 May 1991. That letter included an understanding of cost sharing requirements for the study.

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[1] Funds allocated for Fiscal Years 1993 and 1994 were excessed due to diversion of manpower to the 1993 midwest flood event and subsequent repair work.

2b. Flood Damage Prevention Studies: Missouri, Swope Park Industrial Area, Kansas City (Continued)

Fiscal Year 1995 funds will be used to initiate the reconnaissance phase of the study at full Federal expense. Fiscal Year 1996 funds will be used to complete the reconnaissance study. If the reconnaissance report is certified to be in accord with policy, funds requested for the following year will be used to continue into the feasibility phase of the study. The preliminary estimated cost of the feasibility phase is $702,000, which is to be shared on a 50-50 percent basis by Federal and non-Federal interests. Up to one-half of the non-Federal share may be in-kind services. A summary of study cost sharing is as follows:

Total Estimated Study Cost	$936,000
Reconnaissance Phase (Federal)	234,000
Feasibility Phase (Federal)	351,000
Feasibility Phase (Non-Federal)	351,000

The reconnaissance phase is scheduled for completion in September 1996. A completion date is being determined for this feasibility study.

Study	Total Estimated Federal Cost $	Allocation Prior To FY 1995 $	Tentative Allocation FY 1995 $	Allocation FY 1996 $	Additional To Complete After FY 1996 $
NEBRASKA					
Antelope Creek, Lincoln	688,000	343,000	121,000	90,000	134,000

Antelope Creek is a right bank tributary of Salt Creek in Lincoln, Nebraska. Antelope Creek causes flood problems because of reductions in the drainageway and rapid runoff resulting from urbanization of the area downstream of Holmes Park Dam. Estimated annual damages are $1.1 million. Potential solutions include detention storage basins and/or construction of a channel along a route west of the existing channel. The city of Lincoln, the Lower Platte South Natural Resources District, and the University of Nebraska are all sponsoring the project. A feasibility cost sharing agreement was signed in January 1995.

2b. Flood Damage Prevention Studies: Nebraska, Antelope Creek, Lincoln (Continued)

Fiscal Year 1995 funds will be used to initiate the feasibility study. The funds requested for Fiscal Year 1996 will be used to continue the feasibility study. The preliminary estimated cost of the feasibility study is $690,000, which is to be shared on a 50-50 percent basis by Federal and non-Federal interests. Up to one-half of the non-Federal share may be in-kind services. A summary of study cost sharing is as follows:

Total Estimated Study Cost	$1,033,000
Reconnaissance Phase (Federal)	343,000
Feasibility Phase (Federal)	345,000
Feasibility Phase (Non-Federal)	345,000

The reconnaissance phase was completed in January 1995. A completion date is being determined for this feasibility study.

Study	Total Estimated Federal Cost $	Allocation Prior To FY 1995 $	Tentative Allocation FY 1995 $	Allocation FY 1996 $	Additional To Complete After FY 1996 $
Lower Platte River and Tributaries	1,875,000	0	134,000	441,000	1,300,000

The study area is in the eastern third of the state of Nebraska. The area includes the Lower Platte River from just below the confluence with the Wood River to the confluence with the Missouri River, the Loup River from Fullerton to the confluence with the Lower Platte, Salt Creek from above Lincoln to the confluence with the Lower Platte, and the Elkhorn River from Norfolk to the confluence with the Lower Platte. There are two major and seven minor tributaries to the Platte River in the study reach, 27 communities, and several environmentally sensitive areas. This area, about 750 square miles, with over 6,000 square miles of contributing area, is subject to frequent, severe flooding that causes estimated annual damages of nearly $14 million. Existing projects prevent about $6 million a year in damages. The most recent flood occurred 7-21 March 1993, forcing the evacuation of 1,400 people from their homes. The flood killed two people and devastated road and bridge systems, public and private utilities, and farm equipment and facilities. Interstate 80 near Lincoln was closed for more than 24 hours. The water system for the city of Lincoln was seriously damaged; and there was extensive damage in the towns of Norfolk, West Point, Scribner, Winslow, Nickerson, Arlington, Waterloo, Fullerton, Columbus, Schuyler, and Cedar Creek. Damages totaled over $25 million. The declared disaster area included 14 counties. All damages occurred outside of the 13 existing flood protection projects in the basin. These projects prevented over $18 million in damages for this event alone, and prevented an additional $10 million in damages from the summer 1993 flooding.

2b. Flood Damage Prevention Studies: Nebraska, Lower Platte River and Tributaries (Continued)

The existing area hydrology, being more than 20 years old, is of questionable value in predicting and correcting flood problems. The reconnaissance study is reviewing hydrology of the Lower Platte River, including contributions from the Elkhorn and Loup Rivers, is reexamining flood and related erosion and sedimentation damages, and will formulate a wide range of alternative solutions.

The state of Nebraska, the Nebraska Natural Resources Commission (NNRC), the Lower Platte South Natural Resources District (NRD), Lower Elkhorn NRD, Papio-Missouri River NRD, and the Lower Platte North NRD have stated their intent to support a feasibility study and any resulting projects. The NNRC will be the lead agency in these efforts. The Governor of Nebraska sent a letter dated 27 April 1993 requesting the study. In addition, supporting requests were received from the Lower Platte North NRD, dated 27 April 1993, from the Papio-Missouri NRD, dated 9 April 1993, and from the Lower Platte South NRD, dated 18 May 1993.

Fiscal Year 1995 funds are being used to initiate the reconnaissance phase at full Federal expense. Fiscal Year 1996 funds will be used to complete the reconnaissance phase. The preliminary estimated cost of the feasibility phase is $2,600,000, which is to be shared on a 50-50 percent basis by Federal and non-Federal interests. Up to one half of the non-Federal share may be in-kind services. A summary of study cost sharing is as follows:

Total Estimated Study Cost	$ 3,175,000
Reconnaissance Phase (Federal)	575,000
Feasibility Phase (Federal)	1,300,000
Feasibility Phase (Non-Federal)	1,300,000

The reconnaissance phase is scheduled for completion in July 1996. A completion date is being determined for the feasibility study.

2c. Shoreline Protection Studies: None.

Study	Total Estimated Federal Cost $	Allocation Prior To FY 1995 $	Tentative Allocation FY 1995 $	Allocation FY 1996 $	Additional To Complete After FY 1996 $
2d. Special Studies: The amount of 10,000 is requested to continue one special study.					
SOUTH DAKOTA					
James River Environmental	498,000	274,000	0	10,000	214,000

The James River, in South Dakota, winds for over 450 miles through the lower part of the Prairie Pothole Region, an area known for its high concentration of wetlands and waterfowl production (about 50 percent of the North American ducks). The Prairie Pothole Region, including the James River, is subject to high yearly and seasonal variations in precipitation and runoff. This adversely affects the capability of the region and the river to consistently produce waterfowl and other aquatic life. Frequent lack of flow and stagnating water can mean the loss of an entire year of aquatic production.

A plan to provide measures for channel restoration and flow regulation along the river was authorized by the Water Resources Development Act of 1986. The James River Water Development District has developed and is implementing portions of a restoration plan. State and local interests together have expended about $3.1 million in project planning and in initial project construction, but major portions of this plan cannot be implemented without Federal assistance.

The Omaha District's draft environmental initiative report, submitted in February 1992, identified six projects which would improve flow conditions and fish and wildlife resources along the river and its tributaries. After an extensive public review, which included several public meetings and meetings with landowners, all of the six projects initially recommended were eventually dropped from consideration in the feasibility phase. However, due to the heavy summer flooding in late 1993, landowners opposed to the largest of the previously identified projects, Putney Slough, are now willing to sell their land and are negotiating the sale with the local sponsors. If successful, the feasibility cost sharing agreement will likely include the Putney Slough project and other measures in the vicinity, including the Columbia Dam and restoration of oxbow wetlands. The geographic scope of the study is now limited to the lower Elm River and upper James River in northern Brown County. The Corps will be the lead agency for the study; but the U.S. Fish and Wildlife Service, the South Dakota Department of Game, Fish and Parks, and the South Dakota Department of Environment and Natural Resources will play important roles. The James River Water Development District is the study sponsor.

Study	Total Estimated Federal Cost $	Allocation Prior To FY 1995 $	Tentative Allocation FY 1995 $	Allocation FY 1996 $	Additional To Complete After FY 1996 $

2d. Special Studies, South Dakota: James River Environmental (Continued)

No funds are scheduled for expenditure in Fiscal Year 1995, pending completion of the sponsor's negotiations with landowners in the Putney Slough area. Funds requested for Fiscal Year 1996 will be used to initiate the feasibility phase of the study. Some technical assistance is being provided at no cost by the James River Water Development District and other concerned agencies. The preliminary estimated cost of the feasibility phase is $448,000, which is to be cost shared on a 50-50 percent basis by Federal and non-Federal interests. Up to one half of the non-Federal share may be in-kind services. A summary of cost sharing is as follows:

Total Estimated Study Cost	$ 722,000
Reconnaissance Phase (Federal)	274,000
Feasibility Phase (Federal)	224,000
Feasibility Phase (non-Federal)	224,000

The reconnaissance phase is scheduled for completion in June 1995. A completion date is being determined for the feasibility study.

2e. Comprehensive Studies: None.

2f. Review of Deferred Projects: None.

Study	Total Estimated Federal Cost $	Allocation Prior To FY 1995 $	Tentative Allocation FY 1995 $	Allocation FY 1996 $	Additional To Complete After FY 1996 $
KANSAS					
Kanopolis Lake	250,000	250,000[1]	0	0	0

2g. Review of Completed Projects: An amount of $825,000 is required to continue review of three completed projects. Funds previously allocated will be used to continue review of a fourth completed project.

Kanopolis Lake, located in central Kansas, is one unit of the Missouri River basin comprehensive plan for flood control and other purposes authorized by the Flood Control Act approved 28 June 1938, as modified by subsequent acts. The primary project purpose is flood damage reduction for areas along the Smoky Hill and Kansas Rivers, with incidental benefits for recreation, abatement of stream pollution, maintenance of a minimum streamflow, and reduction of flood heights on the Missouri and Mississippi Rivers. Additional project purposes of irrigation, municipal and industrial (M&I) water supply, fish and wildlife conservation and development, and environmental preservation were authorized by Public Law 94-423 and the Reclamation Authorizations Act of 1976. Although reallocation of 162,500 acre-feet of the initial flood-control capacity was authorized for irrigation, water supply, and low-flow supplementation, Kanopolis Lake has not been structurally modified to impound waters for the additional project purposes.

Currently, there is one M&I water supply withdrawal being made from Kanopolis Lake. Additional interest in water supply storage has been expressed by the Bureau of Reclamation, the Kansas Water Office, and other Federal, state, and local organizations. In February 1991, the Kansas Water Office completed an assessment of the potential for a reallocation of the existing sedimentation storage at Kanopolis Lake for water supply. The report concluded that the state of Kansas should pursue such a reallocation with eventual acquisition of the storage under the terms of the 1985 Memorandum of Understanding (MOU) between the Department of the Army and the state of Kansas. Kanopolis Lake was not included in the 1985 MOU due to insufficient demand for M&I water supply at that time. Reallocation and acquisition of existing sedimentation storage at Kanopolis Lake may meet current needs, but will not be sufficient to satisfy future M&I requirements.

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[1] Funds provided in Fiscal Year 1993 have been carried over. Study start was delayed due to diversion of manpower to the 1993 midwest flood and subsequent repair work.

Study	Total Estimated Federal Cost $	Allocation Prior To FY 1995 $	Tentative Allocation FY 1995 $	Allocation FY 1996 $	Additional To Complete After FY 1996 $

2g. Review of Completed Projects: Kansas, Kanopolis Lake (Continued)

The likely result of this study is a recommendation for a pool raise to satisfy these additional future water supply requirements. This issue was partially addressed in the Kansas and Osage Rivers Feasibility Study approved on 9 August 1989. Yield determinations were made, and a preliminary estimate of the structural costs for a pool raise was completed. However, the cost of storage would depend on a determination as to whether MOU terms would apply. Additionally, the environmental, social and cultural effects of a Kanopolis Lake pool raise and possible interbasin transfer of water could be significant. Technical issues concerning the operation of the spillway after a pool raise, dam safety requirements, and the structural modifications required at the dam also would be investigated during the study. The Kansas Water Office, recognizing the need to initiate study efforts as soon as possible, officially requested on 2 May 1991 that the Corps of Engineers investigate pool raise issues for future water supply for the state of Kansas and indicated awareness of the cost sharing requirements for the study.

Fiscal Year 1993 funds will be used to fully fund the reconnaissance phase of the study at full Federal expense. The reconnaissance study is scheduled to be completed in April 1996, which is 12 months after initiating the study.

Study	Total Estimated Federal Cost $	Allocation Prior To FY 1995 $	Tentative Allocation FY 1995 $	Allocation FY 1996 $	Additional To Complete After FY 1996 $
2g. Review of Completed Projects: (Continued)					
KANSAS					
Salina	340,000	0[1]	10,000[2]	200,000	130,000

Salina is located in central Kansas, in a region drained by the Smoky Hill River, Mulberry Creek, and Dry Creek. Over 17,000 residential units, with an estimated total value of $1.3 billion, are located within the flood plain, as are two light industrial parks. A flood control project was authorized for the city by the Flood Control Act of 1954. The project was completed in 1967 at a total Federal cost of $3,879,000. Latest available information indicates the project has prevented $17,443,000 in flood damages through December 1993. Storms in July 1993 caused water to back up on the levee slopes, but the protection system was not seriously threatened.

Preliminary hydraulic analysis by the city in connection with proposed municipal development indicates that significant portions of the Federally constructed flood control project would be overtopped by the 100-year frequency flood event. Because Salina is extremely flat, failure of the project through overtopping of the levee system could be catastrophic. The lack of protection could result in the loss of Federal Emergency Management Administration (FEMA) certification, which would cause economic hardship on current and future development. The city of Salina requested the study by letter dated 26 May 1992. Hydraulic and hydrology data will be updated to verify the frequency of existing protection.

Fiscal Year 1996 funds will be used to continue the reconnaissance phase at full Federal expense. The reconnaissance phase is scheduled for completion in July 1997.

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[1] Funds allocated for Fiscal Year 1994 were excessed due to diversion of manpower to the 1993 midwest flood event and subsequent repair work.

[2] Funds allocated for Fiscal Year 1995 were partly reprogrammed. (Reevaluation of the district's overall capability in the General Investigations program indicated the necessity of delaying initiation.)

Study	Total Estimated Federal Cost $	Allocation Prior To FY 1995 $	Tentative Allocation FY 1995 $	Allocation FY 1996 $	Additional To Complete After FY 1996 $
2g. Review of Completed Projects: Kansas (Continued)					
Topeka	387,000	0[1]	10,000[2]	150,000	227,000

The Kansas River runs through the center of Topeka, Kansas, the state's capital. All of Topeka and most of south Topeka are located in the protected flood plain. Construction of a flood protection project at Topeka was completed in Fiscal Year 1974 at a total Federal cost of $21,175,000. The project consists of about 38 miles of levee, 10 miles of channel modification, 9 storm-water pumping plants, numerous pressure relief wells and other appurtenances. The project has prevented an estimated $229,280,000 in flood damages through December 1994, with an estimated $57,792,000 prevented in July and August 1993.

Hydraulic analysis by the Kansas Department of Transportation and a subsequent study by the city indicate that significant portions of the existing levee system at Topeka are inadequate to protect against the design 200 - 500-year frequency flood event. The city's study estimated that portions of the levee system may provide less than 100-year frequency flood protection. The city is very concerned about changes that have occurred to the Kansas River both upstream and through Topeka and how those changes may affect current and future development within the city. The growing industrial/commercial and residential development protected by the levee system is estimated to have a total value of several billion dollars. Failure of the levee system by overtopping could result in millions of dollars in damages and loss of life.

This situation is further complicated by design discharge assumptions that were used for levee design that are no longer accurate. The initial design discharge assumptions included the beneficial effects of then existing, authorized and potential upstream flood control lakes. All of the authorized lake projects upstream of Topeka were constructed except for Grove and Onaga, which have been deauthorized. None of the potential projects was ever authorized. The direct impact to Topeka and several other downstream communities is that uncontrolled flood discharges and stages are greater than originally envisioned, and the corresponding level of protection at Topeka is degraded as a result. This situation compounds the riverine changes previously discussed that have occurred over time. Hydraulic and hydrologic data will be updated to verify the frequency of protection.

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[1] Funds allocated for Fiscal Year 1994 were excessed due to diversion of manpower to the 1993 midwest flood event and subsequent repair work.

[2] Funds allocated for Fiscal Year 1995 were partially reprogrammed. (Reevaluation of the district's overall capability in the General Investigations program indicated the necessity of delaying initiation.)

2g. Review of Completed Projects: Kansas, Topeka (Continued)

The city of Topeka requested the reconnaissance study by letter dated 26 March 1992.

Fiscal Year 1996 funds will be used to continue the reconnaissance phase of the study at full Federal expense. The reconnaissance phase is scheduled for completion in October 1997.

MISSOURI

Study	Total Estimated Federal Cost $	Allocation Prior To FY 1995 $	Tentative Allocation FY 1995 $	Allocation FY 1996 $	Additional To Complete After FY 1996 $
Missouri River Levee System, Units L455 and R460-471, MO & KS	1,500,000	0	125,000	475,000	900,000

Missouri River Levee System Units L455 and R460-471 were authorized as part of a comprehensive plan in the Flood Control Act of 1944. Construction of Unit L455 was completed in 1967 at a cost of $4.7 million, and construction of Unit R460-471 was completed in 1968 at a cost of $3.9 million. The two levee units are located on opposite sides of the Missouri River in and near St. Joseph, Missouri. These two levee units were designed and constructed to provide flood protection for a Missouri River flow of 325,000 cubic feet per second with 2 feet of freeboard. Flood flows crested on 26 July 1993 at an estimated 335,000 cubic feet per second. The main stem flood control lakes constructed by the Corps upstream of the area lowered the river stage approximately 2.7 feet. Unit L455 protected 7,500 acres of industrial, residential, and farm land, preventing approximately $176 million in damages; but flood waters were inches from overtopping the levee. Overtopping would have caused catastrophic damages to an industrial area with estimated assets of $1 billion and an annual payroll in excess of $50 million. Unit R460-471 was constructed to protect Elwood and Wathena, Kansas, Rosecrans Army National Guard Base in Missouri, and 10,800 acres of farm land; but this unit failed from overtopping during the 1993 flood, causing more than $65 million in damages.

The reconnaissance study will review the existing protection levels for both levee units to determine if a higher level of protection is feasible. The study will consider both of these units because an increase in the protection level for one unit will have an effect on the other unit's level of protection. Impacts on other levees in the area would also be considered. The hydraulics will be updated to verify the frequency of existing protection, to analyze the requirements for these units, and to determine effects upstream from these units.

APPROPRIATION TITLE: General Investigations, Fiscal Year 1996 Missouri River Division

Study	Total Estimated Federal Cost $	Allocation Prior To FY 1995 $	Tentative Allocation FY 1995 $	Allocation FY 1996 $	Additional To Complete After FY 1996 $

2g. Review of Completed Projects, Missouri: Missouri River Levee System, Units L455 and R460-471, MO & KS (Continued)

The study of Unit L455 has been requested by the South St. Joseph Drainage and Levee District and the St. Joseph Area Chamber of Commerce in letters dated 14 and 21 April 1994, respectively. The levee district's letter indicated an understanding of the cost sharing requirements. Letters requesting a study of Unit R460-471 have been received from the city of Elwood, Kansas, dated 21 April 1994; the city of Wathena, Kansas, dated 18 April 1994; and the Elwood-Glanton Drainage District, dated 31 May 1994. The drainage district's letter indicated an understanding of cost sharing requirements.

Fiscal Year 1995 funds will be used to initiate the reconnaissance phase of the study at full Federal expense. Fiscal Year 1996 funds will be used to complete the reconnaissance phase. If the reconnaissance report is certified to be in accord with policy, future funds will be used to continue into the feasibility phase of the study. The preliminary estimated cost of the feasibility phase if $1,800,000, which is to be shared on a 50-50 percent basis by Federal and non-Federal interests. Up to one-half of the non-Federal share may be in-kind services. A summary of study cost sharing is as follows:

Total Estimated Study Cost	$2,400,000
Reconnaissance Phase (Federal)	600,000
Feasibility Phase (Federal)	900,000
Feasibility Phase (Non-Federal)	900,000

The reconnaissance phase is scheduled for completion in November 1996. A completion date is being determined for the feasibility study.

3. PRECONSTRUCTION ENGINEERING AND DESIGN (PED) - NEW: None.

4. PRECONSTRUCTION ENGINEERING AND DESIGN - CONTINUING:

a. Navigation: None.

APPROPRIATION TITLE: General Investigations, Fiscal Year 1996 — Missouri River Division

4b. Flood Control: The amount of $620,000 is required to initiate PED on one project and continue PED on three projects.

Study	Total Estimated Federal Cost $	Allocation Prior To FY 1995 $	Tentative Allocation FY 1995 $	Allocation FY 1996 $	Additional To Complete After FY 1996 $
MISSOURI					
Blue River Basin, Kansas City	1,600,000	0	0	10,000	1,590,000

The Blue River drains a 272 square-mile area, much of which is a highly urbanized part of the Kansas City Metropolitan Region. About 56 percent of the basin lies in Johnson County, Kansas, and the remainder is in Cass and Jackson Counties, Missouri. Flooding has been a major problem in the basin for many years. A channel modification project is currently under construction on the 12-mile reach approaching the Missouri River. A serious flood problem remains, particularly along the Blue River from 75th Street upstream to its Indian Creek tributary. The May 1990 flood caused approximately $1.5 million in damages to the approximately 1-mile reach of this project area.

The project to be recommended for authorization is estimated to cost $15.3 million, with an estimated Federal cost of $11.3 million and estimated non-Federal cost of $4.0 million. Recommended work includes construction of approximately 1-1/4 miles of levee to provide flood protection to 280 acres in the Dodson Industrial Park and surrounding area. The tentative average annual benefits, all flood control, amount to $1.6 million. The benefit-to-cost ratio is 1.2 to 1 based upon the latest economic analysis dated April 1993. Kansas City, Missouri, is the project sponsor. The city has sponsored other projects and understands the cost sharing requirements.

Fiscal Year 1996 funds will be used to initiate the design memorandum. A completion date is being determined for this preconstruction engineering and design effort.

Study	Total Estimated Federal Cost $	Allocation Prior To FY 1995 $	Tentative Allocation FY 1995 $	Allocation FY 1996 $	Additional To Complete After FY 1996 $
4b. Flood Control (Continued)					
NEBRASKA					
Wood River, Grand Island	850,000	373,000	165,000	200,000	112,000

The project area is located in Hall County, Nebraska, in the southern half of the city of Grand Island. The Wood River basin originates about 80 miles west of Grand Island and drains approximately 770 square miles. Flooding and erosion in the study area are widespread and long in duration. The most significant flood of record occurred in 1967, causing damage estimated at $13.6 million. Total value of flood plain development is nearly $200 million, and expected annual damages are nearly $2.4 million. The feasibility report was completed in May 1993. The Central Platte Natural Resources District, the city of Grand Island, Hall County, and Merrick County are the cost sharing sponsors for the feasibility study and the proposed project. The project to be recommended for authorization has an estimated cost of $11.8 million, with an estimated Federal cost of $6 million and an estimated non-Federal cost of $5.8 million. It will include construction of a floodway to divert flood flows from the Wood River to the Platte River. The average annual benefits amount to $1,846,000, all for flood control. Most of the flood control benefits will accrue to the Grand Island area. The benefit cost ratio is 2.0 to 1, based upon the latest economic analysis dated May 1993.

Fiscal Year 1995 funds are being used to continue the preconstruction engineering and design (PED) phase. Fiscal Year 1996 funds will be used to continue PED, which is scheduled for completion in January 1997.

Study	Total Estimated Federal Cost $	Allocation Prior To FY 1995 $	Tentative Allocation FY 1995 $	Allocation FY 1996 $	Additional To Complete After FY 1996 $
4b. Flood Control (Continued)					
SOUTH DAKOTA					
Big Sioux River, Sioux Falls	1,814,000	590,000	405,000	390,000	429,000

Sioux Falls is located on a large bend of the Big Sioux River in southeastern South Dakota. In 1965 the Corps of Engineers completed a channelization and levee system to provide flood protection from the Big Sioux River and Skunk Creek, a tributary to the Big Sioux River. Even with the existing flood control project in place, expected annual damages are estimated to be $2.3 million from the Big Sioux River and $2.7 million from Skunk Creek. The existing project provides only about a 30-year level of flood protection from floods in the Big Sioux River and 20-year protection from floods on Skunk Creek. The Division Engineer's notice on the feasibility study was issued 29 December 1993. The city of Sioux Falls is the cost sharing sponsor for the proposed project and has most recently indicated support in their city council resolution of 23 May 1994.

The proposed project is estimated to cost $37 million, with an estimated Federal cost of $27 million and an estimated non-Federal cost of $10 million. The project would consist of raising the levee from the diversion dam to the upstream tie-off, raising the diversion channel levee, modifying the chute and stilling basin, raising the diversion dam, raising the levees on Skunk Creek, raising Big Sioux levees downstream of Skunk Creek, and providing for bridge improvements. The average annual benefits amount to $3.5 million, all for flood control. The benefit-cost ratio is 1.3 to 1 based upon the latest economic analysis dated November 1993.

Fiscal Year 1995 funds are being used to continue work on the Design Memorandums. Fiscal Year 1996 funds will be used to continue preconstruction engineering and design, which is scheduled for completion in April 1997.

Study	Total Estimated Federal Cost $	Allocation Prior To FY 1995 $	Tentative Allocation FY 1995 $	Allocation FY 1996 $	Additional To Complete After FY 1996 $
4b. Flood Control: South Dakota (Continued)					
Watertown and Vicinity	870,000	21,000	50,000	20,000	779,000

The study area consists of that part of South Dakota in the contributing Big Sioux River Basin above the north Hamlin County line. The Big Sioux River and the natural lakes in the Big Sioux Basin are generally interconnected with surficial aquifers. These aquifers and surface waters have experienced prolonged high water conditions, which threaten existing housing developments around the lake areas. Lake Kampeska, Watertown, and Pelican Lakes have experienced these conditions, but also have received additional damages due to peak flood discharges. This area also has problems with water quality and sedimentation. The two developed areas most affected are Watertown and adjacent Lake Kampeska, which have an increased permanent population along the lake. The expected annual damages for these two areas are $793,000 and $964,000, respectively. The feasibility report recommends construction of a dry dam on the Big Sioux River just below the confluence of Mahoney Creek to provide flood protection for Watertown and the Lake Kampeska area. The project to be recommended for authorization has an estimated construction cost of $15.8 million, including an estimated Federal cost of $10.9 million and an estimated non-Federal cost of $4.9 million. The benefit-cost ratio is 1.3 to 1, based upon the latest economic analysis dated March 1993. The average annual benefits, all for flood control, amount to $1,517,000. The East Dakota Water Development District is the cost-sharing sponsor for the feasibility study and has most recently indicated support in the 30 April 1993 amendment to the feasibility cost sharing agreement. The Division Engineer's notice on the feasibility study was issued in August 1994.

Fiscal Year 1995 funds are being used to continue preconstruction engineering and design (PED). Fiscal Year 1996 funds will also be used to continue PED. A completion date is being determined for this PED effort.

4c. Shoreline Protection: None

4d. Multiple Purpose Power: None

APPROPRIATION TITLE: Construction, General (Navigation)

PROJECT: Missouri River Fish and Wildlife Mitigation, Iowa, Nebraska, Kansas, and Missouri (Continuing)

LOCATION: All mitigation will occur in the area of impact generally adjacent to the Missouri River in the states of Iowa, Nebraska, Kansas, and Missouri.

DESCRIPTION: The project will mitigate the losses to fish and wildlife resulting from the construction and operation of the Missouri River Bank Stabilization and Navigation Project. Construction of this project was completed in 1980, and it is now being operated and maintained. The mitigation will develop 16,900 acres of public lands (state or other Government-owned); and it will restore and preserve 1,900 acres of non-public aquatic lands, 1,300 acres of public aquatic lands, and 28,000 acres of non-public timber-brush habitat. An estimated 29,900 acres of mostly undeveloped non-public land will be acquired to implement the project.

AUTHORIZATION: Water Resources Development Act of 1986.

REMAINING BENEFIT - REMAINING COST RATIO: Not applicable.

TOTAL BENEFIT-COST RATIO: Not applicable.

INITIAL BENEFIT-COST RATIO: Not applicable.

BASIS OF BENEFIT-COST RATIO: Not applicable.

SUMMARIZED FINANCIAL DATA		ACCUM PCT OF EST FED COST	STATUS: (1 Jan 1995)	PERCENT COMPLETE	PHYSICAL COMPLETION SCHEDULE
Estimated Federal Cost	$69,900,000		Entire Project	19	Being Determined
Estimated Non-Federal Other Costs	0				
Total Estimated Project Cost	$69,900,000				
Allocations to 30 September 1994	$15,259,000	22			
Conference Allowance for FY 1995	10,100,000				
Allocation for FY 1995	8,501,000 1/				
Allocations through FY 1995	23,760,000	34			

1/ Reflects $1,599,000 reduction assigned as savings and slippage, and $4,000,000 in programmed carryover into FY 1996.

SUMMARIZED FINANCIAL DATA (Continued)		ACCUM PCT OF EST FED COST
Allocation Requested for FY 1996	$5,700,000	42
Programmed Balance to Complete after FY 1996	40,440,000	
Unprogrammed Balance to Complete after FY 1996	0	

PHYSICAL DATA (All Federal)	
Aquatic Habitat Restoration/ Preservation	3,200 acres
Acquisition and Development of Terrestrial Habitat Associated with aquatic areas	8,000 acres
Acquisition and Development of Timber tracts	20,000 acres
Development of Timber-Cropland Habitat on Public Lands	16,900 acres
Total	48,100 acres

JUSTIFICATION: The project will preserve and/or restore riverine aquatic and bottomland terrestrial habitat in the Missouri River Valley where similar habitat is already depleted by the construction and operation of the Bank Stabilization and Navigation Project. Only those areas having the most potential will be included in the project, and lands needed for implementation will be acquired from willing sellers to the extent possible. The project will mitigate about 3 percent of aquatic losses and about 7 percent of terrestrial losses which have resulted from the bank stabilization and navigation project.

FISCAL YEAR 1996: The total program amount, including the requested and programmed carryover amounts of $5,700,000 and $4,000,000, respectively, will be applied as follows:

Continue land acquisition	$3,981,000
Initiate construction of California Bend, Iowa site	624,000
Initiate and complete construction of Overton Bottoms, Missouri site	855,000
Initiate construction of Tobacco Island, Nebraska site	508,000
Initiate construction of one or more additional sites in Missouri	105,000
Complete construction of Benedictine Bottoms, Kansas site	808,000
Complete construction of Hamburg Bend, Nebraska site	950,000
Complete construction of Winnebago, Iowa site	895,000
Planning, Engineering, and Design	540,000
Construction Management	374,000
Operation and Maintenance during construction	60,000
Total	$9,700,000

NON-FEDERAL COSTS: Not applicable

STATUS OF LOCAL COOPERATION: The authorizing act provides that the entire cost of this project, including all lands, easements, right-of-way, and relocations, and all operation and maintenance costs be borne by the Federal Government with no costs to either local or state governments. Therefore, there is no non-Federal sponsor for the project. The States of Iowa, Nebraska, Kansas, and Missouri are cooperatively providing support in the form of technical information, site priorities, public involvement, and related information. The states are also providing up to 18,200 acres of public land by easement at no cost for habitat development.

COMPARISON OF FEDERAL COST ESTIMATES: The current Federal cost estimate of $69,900,000 is an increase of $700,000 from the latest estimate ($69,200,000) submitted to Congress (FY 1995). This change includes the following items:

Item	Amount
Price Escalation on Construction Features	$140,000
Design Changes	1,673,000
Post Contract Award and Other Estimating Adjustments	-1,673,000
Price Escalation on Real Estate	560,000
Total	$700,000

STATUS OF ENVIRONMENTAL IMPACT STATEMENT: The Missouri River Mitigation Project Final Environmental Impact Statement was filed with the U.S. Environmental Protection Agency on 23 December 1982.

OTHER INFORMATION: Funds to initiate preconstruction engineering and design were appropriated in FY 1990. Initial construction funds were appropriated in FY 1992.

APPROPRIATION TITLE: Construction, General - Flood Control, Local Protection

PROJECT: Perry Creek, Iowa

LOCATION: The Perry Creek basin is located in Woodbury and Plymouth Counties in northwestern Iowa. The downstream 5 miles of the basin lie within the corporate limits of Sioux City, Iowa, and drain the central portion of the city.

DESCRIPTION: The project consists of 14,800 linear feet of grass and rock lined channel, 1,500 linear feet of new conduit, modification of 710 linear feet of existing conduit, a concrete stilling basin to provide capacity for the 100-year event, and a basin-wide flood warning system.

AUTHORIZATION: Water Resources Development Act of 1986, Section 401a.

REMAINING BENEFIT-REMAINING COST RATIO: 1.71 to 1 at 8 percent

TOTAL BENEFIT-COST RATIO: 1.03 to 1 at 8 percent

INITIAL BENEFIT-COST RATIO: 1.09 to 1 at 8.25 percent (FY 1994)

BASIS OF BENEFIT-COST RATIO: Benefits are from the latest available evaluation approved in July 1992 at October 1990 price levels.

SUMMARIZED FINANCIAL DATA:

			ACCUM. PCT. OF EST. FED COST	STATUS: (1 JAN 1995)	PERCENT COMPLETE	PHYSICAL COMPLETION SCHEDULE
Estimated Federal Cost		$ 40,600,000				
Estimated Non-Federal Cost		25,000,000		Entire Project	14	Being Determined
Cash Contribution	$ 167,000					
Other Costs	$ 24,833,000					
Total Estimated Project Cost		$ 65,600,000				
Allocations to 30 September 1994		$ 3,855,547				
Conference Allowance for FY 1995		5,200,000				
Allocation for FY 1995		4,377,000 1/				
Allocations through FY 1995		8,232,547 2/				

1/ Reflects $823,000 reduction for savings and slippage.
2/ Reflects $4,627,000 in programmed carryover into FY 1996.

SUMMARIZED FINANCIAL DATA (continued):

		ACCUM. PCT. OF EST. FED COST	PERCENT	PHYSICAL COMPLETION
Allocation Requested for FY 1996	$ 168,000	20.7		
Programmed Balance to Complete after FY 1996	32,199,453			
Unprogrammed Balance to Complete after FY 1996	0			

PHYSICAL DATA

Relocations:

Roads, Utilities, Structures and Bridges $11,703,000.

Recreation Trail:

Length: 3 miles (approx)
Type: Asphalt

Improvements:

135 Residences
51 Commercial properties

Channel:

Length: 2.8 miles
Level of Protection: 100-year Flood
Location: Perry Creek

Stilling Basin:

Length: 132 linear feet
Material: Concrete

Conduit:

Length: 2,208 linear feet
Level of Protection: 100-year Flood
Location: Perry Creek

Bridges:

Demolitions: 13 roadway and 1 railroad
Replacements: 7 roadway and 1 railroad
New Construction: 2 roadway
Not being replaced: 4 roadway

JUSTIFICATION: The project will provide urgently needed flood protection to the metropolitan and downtown areas of Sioux City, Iowa. The flood problem is severe under the present stage of urban development. Between 1892 and 1990, 24 floods have occurred on Perry Creek, with very little warning time. Ten of these floods were considered to be major. The floods of 18-19 May, 1990 and 22-23 May, 1990 produced damages estimated between $9,000,000 to $11,000,000. Average annual flood damages are estimated at $5,851,000, and the project will reduce the flood damage potential by approximately 90 percent. The estimated average annual benefits are as follows:

JUSTIFICATION (continued):

Annual Benefits	Amount
Flood Control	$ 5,219,000
Recreation	161,000
Conduit Roof Cost Savings	531,000
Advance Replacement of Bridges	83,000
Total	$ 5,994,000

FISCAL YEAR 1996: The total program amount including the requested and programmed carryover amounts of $168,000 and $4,627,000, respectively, will be applied as follows:

Railroad Bridge Relocation	$ 377,000
Initiate Phase I Conduit and Outlet Construction	1,800,000
Initiate Phase II Conduit and Outlet Construction	23,000
Initiate Levee Floodway Construction	1,900,000
Continue Planning, Engineering and Design	325,000
Continue Construction Management	370,000
Total	$ 4,795,000

NON-FEDERAL TOTAL COST: In accordance with the project authorization and the cost sharing policies contained in the Water Resources Development Act of 1986, the non-Federal sponsor must comply with the requirements listed below:

Requirement of Local Cooperation	Payment during Construction	Annual Operation, Maintenance, Repair, Rehabilitation and Replacement Costs
Provide all lands, easements, right-of-ways, and dredged material disposal areas.	$13,130,000	
Execute all relocations of utilities, buildings, roads, bridges (except railroad bridges), and other facilities, required for construction of the project.	11,703,000	
Bear all costs of operation, maintenance, repair, rehabilitation and replacement of flood control facilities		$ 28,400
Pay 38 percent of costs allocated to fish and wildlife mitigation and bear all costs of operation, maintenance, repair, rehabilitation, and replacement of fish and wildlife facilities	11,000	0

NON-FEDERAL TOTAL COST (continued):

Requirement of Local Cooperation	Payment during Construction	Annual Operation, Maintenance, Repair, Rehabilitation and Replacement Costs
Pay one-half of the separable cost allocated to recreation, and bear all costs of operation, maintenance, repair, rehabilitation, and replacement.	129,000	1,500
Pay 25 percent of the costs allocated to non-structural flood control and bear all costs of operation, maintenance, repair, rehabilitation, and replacement.	27,000	2,500
Total Non-Federal Costs	$25,000,000	$ 32,400

STATUS OF LOCAL COOPERATION: The ability to pay provisions of WRDA of 1986 have been modified by rule changes published in the Federal Register in mid-January 1995. The new provisions allow elimination of the 5% cash contribution if both of the following are met 1) LERRD comprise 35% or more of the total project cost and 2) the per capita cost exceeds $300 per person. The city of Sioux City, Iowa meets both of the requirements to waive the 5% cash contribution. The Project Cooperation Agreement with the city of Sioux City, Iowa to sponsor the Perry Creek flood control project can now be executed.

COMPARISON OF FEDERAL COST ESTIMATES: The current Federal cost estimate of $40,600,000 is a increase of $3,034,000 from the latest estimate ($37,566,000) presented to Congress (FY 1995). This change includes the following items:

Item	Amount
Price Escalation on Construction Features	$ + 718,000
Other Estimating Adjustments	- 760,000
Elimination of 5% Cash Contribution by non-Federals	+ 3,076,000
Total	$ 3,034,000

STATUS OF ENVIRONMENTAL IMPACT STATEMENT: All comments on the draft EIS have been received and reviewed. No substantive issues were identified. All issues have been addressed in the final Supplemental 1 to the Final EIS filed with EPA on 17 July 1992.

OTHER INFORMATION: Funds to initiate preconstruction engineering and design were appropriated in FY 1984. Fish and wildlife mitigation is estimated to cost $25,000.

APPROPRIATION TITLE: Construction, General - Local Protection Projects (Flood Control)

PROJECT: Missouri River Levee System, Iowa, Nebraska, Kansas, and Missouri (Active Units) (Continuing)

LOCATION: Along both sides of the Missouri River, Sioux City, Iowa, to the Mouth.

DESCRIPTION: A series of levee units and appurtenant works along both sides of the Missouri River from Sioux City, Iowa, to the Mouth, for protection of agricultural lands and small communities against floods.

AUTHORIZATION: 1941 and 1944 Flood Control Acts

REMAINING BENEFIT - REMAINING COST RATIO: 3.7 to 1 at 2 1/2 percent (Unit L385 only)

TOTAL BENEFIT-COST RATIO: Information is not available due to completion of individual units at various times since 1948.

INITIAL BENEFIT-COST RATIO: 1.5 to 1 at 2 1/2 percent (FY 1948)

BASIS OF BENEFIT-COST RATIO: Remaining benefit - remaining cost ratio is for Unit L385 only. Unit L385 benefit and cost data is at 1 October 1994 values and is based on a Supplemental Report to the General Design Memorandum dated 18 November 1994 and approved 5 December 1994. Economic data for Unit L142 are not available pending completion of the reevaluation report (decision document).

SUMMARIZED FINANCIAL DATA

Estimated Federal Cost			$128,417,000
Estimated Non-Federal Cost			39,624,000 1/
Cash Contributions		$24,017,000	
Required	$11,072,000		
Voluntary	12,945,000		
Other Costs		15,607,000	
Total Estimated Project Cost			$168,041,000

PHYSICAL DATA

LEVEES	
Average Height	14 feet
Length	428 miles
Area Protected	330,500 acres

1/ In addition, numerous flood control works have been constructed over many years by individuals and groups as land along the Missouri River has developed for agricultural use. The total cost of these improvements is unknown.

SUMMARIZED FINANCIAL DATA (Continued)		ACCUM PCT OF ESTIM FED COST
Allocations to 30 September 1994	$93,127,000	
Conference Allowance for FY 1995	500,000	
Allocation for FY 1995	421,000 1/	
Allocations thru FY 1995	93,548,000	73
Allocation Requested for FY 1996	125,000	73
Programmed Balance to Complete after FY 1996	33,955,000	
Unprogrammed Balance to Complete after FY 1996	789,000	

1/ Reflects $79,000 reduction assigned as savings and slippage, and $126,000 in programmed carryover into FY 1996.

STATUS (1 January 1995)	PERCENT COMPLETE	PHYSICAL COMPLETION SCHEDULE
L624-627, R616, L611-614, R613, L601, L594, R580, L575, R573, R562, L550-561, R548, L536, R520, R512-513, R500, Kimsey, Holly Creek, L497, L488, R482, L476, R460-471, L455, L443-448, R440, L408, L400, R351, & L246	100	
Riverside-Quindaro Bend Levee District (L385)	0	Being Determined
Jefferson City (L142)	0	Being Determined
Entire Active Program	94	Being Determined

JUSTIFICATION: The active units of the authorized Missouri River Levee System, in conjunction with existing and authorized upstream reservoirs, will provide protection against destructive floods of a magnitude equal to those of past record for 429,500 acres of agricultural lands, highways, railroads, and utility lines, as well as for many small communities in the Missouri River flood plain from Omaha, Nebraska, to the mouth. From 1943 through September 1994, 83 floods have been experienced along the lower reaches of the Missouri River. The estimated average annual flood control benefits for all completed and active units between Sioux City and the mouth are not available due to completion of individual units at various times since 1948. Flooding in April 1994 produced one distinct crest along the lower river. Damage from the 1994 event is tentatively estimated at $36.7 million. The system of Federal lakes and levees prevented additional damages estimated at $1.15 billion.

Annual benefits are all flood control.

FISCAL YEAR 1996: The total program amount, including the requested and programmed carryover amounts of $125,000 and $126,000, respectively, will be applied as follows:

Continue Engineering and Design for Unit L385	$50,000
Continue Planning, Engineering and Design for Unit L142	201,000
Total	$251,000

NON-FEDERAL COSTS: Total non-Federal cost is $39,624,000. Under cost sharing principles in effect at the time earlier units were under construction, non-Federal sponsors provided lands, easements, and rights-of-way valued at $8,324,000 and contributed $400,000 for interior drainage work. The sponsors are also providing operation, maintenance, and replacements at a current annual cost of $700,000 (1 October 1994).

Remaining Requirements of Local Cooperation	Payments During Construction and Reimbursements	Annual Operation, Maintenance, Repair, Rehabilitation, and Replacement Costs
Unit L385 - In accordance with the cost sharing and financing concepts reflected in the Water Resources Development Act of 1986, the non-Federal sponsor must comply with the requirements listed below:		
Provide lands, easements and rights-of-way	$3,452,000	
Modify or relocate buildings, utilities, roads, bridges (except railroad bridges), and other facilities, where necessary for the construction of the project	1,233,000	
Pay 16 percent of the costs allocated to flood control to bring the total non-Federal share of flood control costs to 25 percent of Unit L385, and bear all costs of operation maintenance, and replacement of flood control facilities	8,415,000	$40,000 (1 October 1994)
Total Non-Federal Required Costs	$13,100,000	

NON-FEDERAL COSTS: (Continued)

Remaining Requirements of Local Cooperation (Continued)	Payments During Construction and Reimbursements	Annual Operation, Maintenance, Repair, Rehabilitation, and Replacement Costs
In addition voluntary special cost sharing will be provided by the non-Federal interests to pay 100 percent of costs allocated to land development	$12,945,000	
Total Non-Federal Costs During Construction (L385)	26,045,000	
The non-Federal sponsor understands that payments are required during project construction.		
Unit L142 - In accordance with the cost sharing and financing concepts reflected in the Water Resources Development Act of 1986, the non-Federal sponsor must comply with the requirements listed below:		
Provide lands, easements and rights-of-way	389,000	
Modify or relocate buildings, utilities, roads, bridges (except railroad bridges), and other facilities, where necessary for the construction of the project	1,809,000	
Pay 14 percent of the costs allocated to flood control to bring the total non-Federal share of flood control costs to 25 percent of Unit L142, and bear all costs of operation, maintenance, and replacement of flood control facilities	2,657,000	$15,000 (1 October 1994)
Total Non-Federal Costs During Construction (L142)	$4,855,000	
The non-Federal sponsor understands that payments are required during project construction.		

STATUS OF LOCAL COOPERATION: Sponsor of Unit L385 is the Riverside-Quindaro Bend Levee District. The sponsor agreed to assume additional voluntary cost sharing for costs associated with land development in the Quindaro Bend portion of the project to obtain Washington-level project support. Unit L385 was approved for a new construction start in FY 1994. A draft Project Cooperation Agreement was submitted for sponsor's review on 14 October 1992. The sponsor has not acted on the draft Project Cooperation Agreement pending completion of plans and specifications, and cleanup and repair work following the 1993 flood.

Unit L142 - Jefferson City officials provided a letter of intent dated 14 May 1991 which indicated an understanding of the cost sharing involved and expressed a willingness to sponsor the project. The governor of Missouri, Senator Christopher Bond, and the Jefferson City Area Chamber of Commerce have all provided letters in support of the project. Scheduled Project Cooperation Agreement execution date is November 1997.

COMPARISON OF FEDERAL COST ESTIMATES: The current Federal cost estimate of $128,417,000 for the active program is an increase of $1,147,000 from the latest estimate ($127,270,000) presented to Congress (FY 1995). This change includes the following:

Item	Amount
Price Escalation on Construction Features	$580,000
Design Changes	1,453,000
Post Contract Award and Other Estimating Adjustments	2,285,000
Sundry	-3,171,000
Total	$1,147,000

STATUS OF ENVIRONMENTAL IMPACT STATEMENTS: The final EIS for Unit L385 was filed with the Environmental Protection Agency on 18 November 1983.

OTHER INFORMATION: Funds to initiate preconstruction planning were appropriated in FY 1946 and to initiate construction in FY 1948.

Unit L142 was reclassified to the active category in May 1991 based on the preliminary results of an Initial Appraisal Report prepared in response to a request from the City of Jefferson City, Missouri. The Initial Appraisal Report, approved in August 1991, concluded that a flood control project could be feasible based on preliminary benefit and cost data and recommended proceeding with detailed planning, engineering and design. Funds to initiate preparation of a Reevaluation Report were appropriated in FY 1993. The July 1993 flood event devastated the entire area being evaluated. A new economic survey, study of alternate levee alignments, and new cost estimates are required as a result of the flood damages. The Reevaluation Report, scheduled for completion in August 1995, will document whether or not a feasible project can be constructed. Planning, engineering and design will be terminated if a feasible project is not identified.

APPROPRIATION TITLE: Construction, General - Local Protection Projects (Flood Control)

PROJECT: Blue River Channel, Kansas City, Missouri (Continuing)

LOCATION: The project is located along the Blue River and tributaries in Kansas City, Jackson County, Missouri, and extends from near its mouth (located at Missouri river mile 358.0) to 63rd Street, channel mile 12.5.

DESCRIPTION: The project plan consists of a channel modification along 12.5 miles of the Blue River channel providing flood protection for a once in 30-year flood and reducing flooding for less frequent events.

AUTHORIZATION: 1970 Flood Control Act

REMAINING BENEFIT - REMAINING COST RATIO: 5.9 to 1 at 6 5/8 percent.

TOTAL BENEFIT-COST RATIO: 3.4 to 1 at 6 5/8 percent.

INITIAL BENEFIT-COST RATIO: 1.6 to 1 at 6 5/8 percent (FY 1979).

BASIS OF BENEFIT-COST RATIO: Benefits are from the Supplemental Report dated 24 October 1990 to the General Design Memorandum and approved on 14 December 1990 at October 1990 price levels.

SUMMARIZED FINANCIAL DATA		ACCUM PCT OF EST FED COST
Estimated Federal Cost	$185,000,000	
Estimated Non-Federal Other Costs	31,900,000	
Total Estimated Project Cost	$216,900,000	
Allocations to 30 September 1994	$71,815,000	
Conference Allowance for FY 1995	8,800,000	
Allocation for FY 1995	5,607,000 1/	
Allocations through FY 1995	77,422,000 2/	42

1/ Reflects $1,393,000 reduction assigned as savings and slippage, and $1,800,000 reprogrammed from the project.

2/ Reflects $5,730,000 in programmed carryover into FY 1996.

STATUS: (1 Jan 1995)	PERCENT COMPLETE	PHYSICAL COMPLETION SCHEDULE
Entire Project	42	Being Determined

PHYSICAL DATA

Bridge Alterations at Federal Cost:	
Railroad Bridges - Modify - 15	$24,895,000
Bridge Alterations at Non-Federal Cost:	
Highway Bridges - Modify - 4	$7,570,000
Channel Improvement: Length	
Main Stem, Blue River Channel	12.5 miles

SUMMARIZED FINANCIAL DATA (Continued)		ACCUM PCT OF ESTIM FED COST
Allocation Requested for FY 1996	$9,600,000	47
Programmed Balance to Complete after FY 1996	97,978,000	
Unprogrammed Balance to Complete after FY 1996	0	

JUSTIFICATION: The Blue River basin lies completely in the Kansas City Metropolitan Region, with a 1990 population of 1,566,000 persons. The basin drains an area of 272 square miles and is subject to cloudbursts, prolonged rainstorms, floods, and extended drought periods. The maximum flood of record in the basin occurred in September 1961 and caused an estimated $8 million in damages. An August 1982 flood caused an estimated $3.3 million in damages, and an October 1986 flood along the Brush Creek tributary of the river caused an estimated $209,000 in damages in the lower flood plain. A major flood occurred on the lower portion of the river in May 1990 and caused damages estimated at $100.8 million. The July 1993 flood was not severe in this basin, causing damages estimated at $60,000. The authorized project would have prevented all but minor damages caused by the 1961 event, and all damages caused by the later events. The channel project provides for about a 30-year level of protection to 3,400 acres in the lower basin, including the Blue River Valley Industrial District. Estimated annual average benefits, all flood control, based on 1 October 1990 prices, are $43.6 million, of which $41.2 million are existing benefits and $2.4 million are future benefits.

FISCAL YEAR 1996: The total program amount, including the requested and programmed carryover amounts of $9,600,000 and $5,730,000, respectively, will be applied as follows:

Continue relocation of railroads	$6,365,000
Continue construction of channel	8,000,000
Engineering and Design	500,000
Construction Management	465,000
Total	$15,330,000

NON-FEDERAL COSTS: Local interests are required to furnish without cost to the United States all lands, easements, and rights-of-way required for construction and subsequent maintenance of the project; hold and save the United States free from damages due to construction; perform without cost to the United States necessary highway, highway bridge, and utility alterations required in connection with this project; maintain and operate the project after completion in accordance with regulations prescribed by the Secretary of the Army; and adequately inform all affected persons, at least annually, that the project will not provide complete flood protection. The investment is broken down as follows:

NON-FEDERAL COSTS: (Continued)

Lands and Damages	$18,286,000
Relocations	13,614,000
Total	$31,900,000

It is estimated that the average annual expenditure for operation, maintenance and replacements will total $73,000 (1 October 1994).

STATUS OF LOCAL COOPERATION: The Section 221 Agreement was signed by the Kansas City District Engineer on 8 September 1983. The City of Kansas City, Missouri, has provided all of the rights-of-way for Stages 1 and 2. Stage 3 right-of-way requirements have been provided to the city and the city has begun acquisition. The current non-Federal cost estimate of $31,900,000 is an increase of $2,100,000 from the latest estimate of $29,800,000 presented to Congress (FY 1995). The change is due to additional street and bridge relocations, $2,000,000, and adjustments in the estimated inflation allowance through the construction period, $100,000.

COMPARISON OF FEDERAL COST ESTIMATES: The current Federal cost estimate of $185,000,000 is an increase of $3,000,000 from the latest estimate ($182,000,000) presented to Congress (FY 1995). This change includes the following items:

Item	Amount
Price Escalation on Construction Features	$3,000,000
Design Changes	47,000
Post Contract Award and Other Estimating Adjustments	-47,000
Total	$3,000,000

STATUS OF ENVIRONMENTAL IMPACT STATEMENT: Final statement on Blue River Basin plan made in connection with preauthorization studies was filed with the Council on Environmental Quality (CEQ) on 13 November 1970. A more complete draft statement on the Blue River Basin plan, including specific information on the impacts of the Blue River Channel, was filed with the CEQ on 11 April 1974. The final statement was forwarded to HQUSACE on 24 October 1974, and was filed with the CEQ on 8 September 1975.

OTHER INFORMATION: Funds to initiate preconstruction engineering and design were appropriated in FY 1973, and funds to initiate construction were appropriated in FY 1979.

APPROPRIATION TITLE: Construction, General (Flood Control)

PROJECT: Missouri National Recreational River, Nebraska and South Dakota (Continuing)

LOCATION: The Missouri River between Gavins Point Dam and Ponca State Park, Nebraska. This includes Cedar and Dixon Counties in Nebraska, and Yankton, Clay, and Union Counties in South Dakota.

DESCRIPTION: Development of the river to protect and enhance the existing qualities which resulted in its classification as a National Recreational River under the Wild and Scenic Rivers System. The qualities include scenic, recreational, fish and wildlife, and cultural values of the river reach. Development includes recreation facilities, river access sites, threatened and endangered species habitat, erosion protection, and acquisition of scenic easements.

AUTHORIZATION: Section 707 of the National Parks and Recreation Act of 1978.

REMAINING BENEFIT-REMAINING COST RATIO: Not available because monetary benefits have not been quantified.

TOTAL BENEFIT-COST RATIO: N/A

INITIAL BENEFIT-COST RATIO: N/A

BASIS OF BENEFIT-COST RATIO: N/A

SUMMARIZED FINANCIAL DATA			
Estimated Federal Cost			$21,000,000
Programmed Construction		$ 2,749,000	
Unprogrammed Construction		18,251,000	
Estimated Non-Federal Cost			640,000
Programmed Construction			
Cash Contribution	$ 0		
Other Costs	640,000		
Estimated Non-Federal Cost		0	
Unprogrammed Construction			
Cash Contributions	0		
Other Costs	0		

STATUS (1 JAN 1995)	PERCENT COMPLETE	PHYSICAL COMPLETION SCHEDULE
Myron Grove River Access	100	
Habitat for Threatened and Endangered Species (Phase I)	100	
Yankton-Riverside Park Access Recreation Site	100	
Scheduled Elements	73	
Remaining Elements	0	Unscheduled
Habitat for Threatened and Endangered Species (Phase 2)	70	Sep 1995

SUMMARIZED FINANCIAL DATA (continued)

			Pct. of Est. Fed. Cost
Total Estimated Programmed Construction Costs	3,389,000		
Total Estimated Unprogrammed Construction Costs	18,251,000		
Total Estimated Project Cost	$21,640,000		
Allocations to 30 September 1994	1,873,000		
Conference Allowance for FY 1995	100,000		
Allocation For FY 1995	84,000	1/	
Allocations through FY 1995	1,957,000	2/	9
Allocation Requested for FY 1996	20,000		
Programmed Balance to Complete after FY 1996	772,000		
Unprogrammed Balance to Complete after FY 1996	$18,251,000		

PHYSICAL DATA

Length: 59 miles of uncontrolled river.
Area: Approximately 19,600 acres within the designated corridor.

1/ Reflects $16,000 reduction for savings and slippage.
2/ Reflects $15,000 in programmed carryover into FY 1996.

JUSTIFICATION: Designation as a Recreational River will preserve outstanding and important values and will provide additional opportunities for river access and recreation use. The project will provide annually for 563,000 visitor days for general recreation and 187,000 visitor days for fish and wildlife recreation. Erosion control will also be provided to the extent it is supported by local interests and is compatible with recreational river status. The project reach is one of the few remaining reaches of the Missouri River that is essentially free of man-made structures, and it still offers an example of the dynamics of a free-flowing river in a relatively natural state.

FISCAL YEAR 1996: The total program amount, including the requested and programmed carryover amounts of $20,000 and $15,000 respectively will be applied as follows:

Fish and Wildlife Facilities	$ 15,000
Planning, Engineering and Design	16,000
Project Management	4,000
Total	$ 35,000

NON-FEDERAL COSTS: In accordance with the cost sharing and financing concepts reflected in the Water Resources Development Act of 1986, the non-Federal sponsor must comply with the requirements listed below.

Requirements of Local Cooperation	Payments During Construction and Reimbursement	Annual Operation, Maintenance, and Replacement Costs
Myron Grove River Access Pay one-half of the separable costs of recreation facilities and bear all costs of operation, maintenance, and replacement of recreation facilities.	$ 33,000	$ 13,000
Total Non-Federal Costs	$ 33,000	$ 13,000
Yankton Riverside Park Pay one-half of the separable costs of recreation facilities and bear all costs of operation, maintenance, and replacement of recreation facilities.	$ 607,000	$ 77,000
Total Non-Federal Costs	$ 607,000	$ 77,000
General Work Pay 25 percent of the first costs of fish and wildlife enhancement, and of the costs of operation, maintenance, and replacement of fish and wildlife facilities.	1/	1/
Pay 100 percent of the costs allocated to prevention of erosion to private roads.	1/	1/
Pay the appropriate percent of the cost for prevention of erosion based on purpose for the acquisition of interest in the lands.	1/	1/
Total Non-Federal Costs	1/	1/

1/ Costs to be developed as planning on project proceeds.

STATUS OF LOCAL COOPERATION: In general, all agencies and local citizens and groups are in favor of the project. However, recent efforts to acquire sponsors have been unsuccessful. Local interests will be contacted as specific requirements are developed. Potential sponsors are the South Dakota Game, Fish and Parks Department; Union, Clay, and Yankton Counties in South Dakota; the Lewis and Clark Natural Resources District; and Cedar and Dixon Counties in Nebraska. An agreement pursuant to Section 215 of the Flood Control Act of 1968 has been signed with the city of Yankton and in 1989 for the construction of Riverside Park in Yankton. Construction was completed 1 June 1991. A cost sharing contract with the State of South Dakota for the Myron Grove access site was signed on 26 June 1986, and construction was completed in June 1987.

COMPARISON OF FEDERAL COST ESTIMATES: The current Federal cost estimate of $21,000,000 is unchanged from the latest estimate presented to Congress (Fiscal Year 1995) and is limited to that amount by the project authorization. The estimate includes the following items:

Item	Amount
Price Escalation on Real Estate	$ + 95
Price Escalation on Construction Features	+363
Estimating Adjustments	- 458
Total	$ 0

STATUS OF ENVIRONMENTAL IMPACT STATEMENT: The final Environmental Impact Statement (EIS) was filed with the Environmental Protection Agency on 12 August 1980.

OTHER INFORMATION: Funds to initiate planning were appropriated in Fiscal Year 1980. A cooperative agreement between the U.S. Department of the Interior and the U.S. Department of the Army for implementation of this project was signed on 1 February 1980. Funds to initiate construction were appropriated in Fiscal Year 1986 with Federal cost limited to $21,000,000 by law.

A demonstration program to clear selected islands of vegetation was initiated at 100 percent Federal cost to protect Federally-listed threatened and endangered species on the project. Two islands have been cleared of vegetation to provide habitat for the threatened piping plover and endangered interior least tern. To control vegetation, herbicides were applied to the islands during the springs of 1989 and 1990. During these years, there were active tern and plover nesting sites on these islands. These islands were monitored during 1991 and 1992. Nesting success was lower during this time period as vegetation had quickly regrown in the areas. Some small areas were cleared by hand and did show evidence of nesting success. Previous work also included writing a draft report analyzing the effectiveness of the island clearing and coordinating the draft report with the United States Fish and Wildlife Service (USFWS). The results of this phase were presented at the Missouri River and Tributaries - Piping Plover and Least Tern Symposium/Workshop in early 1992. Phase 2 of the habitat project consists of monitoring the cleared islands for habitat changes and threatened and endangered species as well as the construction of new sandbar islands and the protection of existing islands. Beginning in 1996 implementation of a plan to improve/increase habitat for the pallid sturgeon is anticipated. This action is result of a condition contained within the biological opinion on the systemwide operation.

MISSOURI RIVER DIVISION
JUSTIFICATION OF ESTIMATE

APPROPRIATION TITLE: Operation and Maintenance, General, FY 1996

1. **Navigation**

a. Channels and Harbors

The program request of $6,068,000 provides for maintenance of bank stabilization and channel alignment structures on the Missouri River between Sioux City, Iowa, and the Mouth. A stable bank is necessary to prevent erosion of valuable farm lands and provide a secure alignment for flood control levees along the banks, as well as provide a navigable channel.

State/Project Name	ESTIMATED OBLIGATIONS ($) FY 1995 TOTAL	 FY 1996 TOTAL	Reason for Change and Major Maintenance Items
	(Operations) (Maintenance)	(Operations) (Maintenance)	1. Reasons for change in Operations from FY 1995 to FY 1996 (10% +/-) 2. Major Maintenance Items Budgeted in FY 1996 (Threshold $500,000)
Iowa			
Missouri River, Sioux City, Iowa to the Mouth, IA, NE, KS & MO	4,900,000 (2,274,000) (2,626,000)	6,068,000 (2,130,000) (3,938,000)	1. None. 2. Bank stabilization work.
SUBTOTAL - Channel and Harbors	4,900,000 (2,274,000) (2,626,000)	6,068,000 (2,130,000) (3,938,000)	

MISSOURI RIVER DIVISION
JUSTIFICATION OF ESTIMATE

APPROPRIATION TITLE: Operation and Maintenance, General, FY 1996

1. **Navigation (Cont'd)**

b. Locks and Dams - None.

State/Project Name	ESTIMATED OBLIGATIONS ($) FY 1995 TOTAL (Operations) (Maintenance)	FY 1996 TOTAL (Operations) (Maintenance)	Reason for Change and Major Maintenance Items
			1. Reasons for change in Operations from FY 1995 to FY 1996 (10% +/-) 2. Major Maintenance Items Budgeted in FY 1996 (Threshold $500,000)
TOTAL - NAVIGATION	4,900,000 (2,274,000) (2,626,000)	6,068,000 (2,130,000) (3,938,000)	

APPROPRIATION TITLE: Operation and Maintenance, General, FY 1996

2. **Flood Control**

a. Reservoirs

The program request of $29,451,000 includes funds for the operation and maintenance of 24 flood control projects, including essential repair work, and scheduling of flood control reservoir operations within the Division. Annual requirements are for operation and ordinary maintenance of project facilities; labor, supplies, materials and parts for day-by-day functioning of projects; periodic maintenance, repairs and replacements; cultural resource needs; and contract law enforcement. The requested amount also includes application of special recreation use fees for recreation areas.

State/Project Name	ESTIMATED OBLIGATIONS ($) FY 1995 TOTAL	 FY 1996 TOTAL	Reason for Change and Major Maintenance Items
	(Operations)	(Operations)	1. Reasons for change in Operations from FY 1995 to FY 1996 (10% +/-)
	(Maintenance)	(Maintenance)	2. Major Maintenance Items Budgeted in FY 1996 (Threshold $500,000)
Colorado			
Bear Creek Lake	384,000	429,000	
	(371,000)	(416,000)	1. Increased effort to prepare water control manuals.
	(13,000)	(13,000)	2. None.
Chatfield Lake	980,000	1,000,000	
	(805,000)	(838,000)	1. None.
	(175,000)	(162,000)	2. None.

MISSOURI RIVER DIVISION
JUSTIFICATION OF ESTIMATE

APPROPRIATION TITLE: Operation and Maintenance, General, FY 1996

2. **Flood Control (Cont'd)**

a. Reservoirs (Cont'd)

State/Project Name	ESTIMATED OBLIGATIONS ($) FY 1995 TOTAL	 FY 1996 TOTAL	**Reason for Change and Major Maintenance Items**
	(Operations) (Maintenance)	(Operations) (Maintenance)	1. Reasons for change in Operations from FY 1995 to FY 1996 (10% +/-) 2. Major Maintenance Items Budgeted in FY 1996 (Threshold $500,000)
Colorado (Cont'd)			
Cherry Creek Lake	536,000	978,000	
	(516,000)	(550,000)	1. None.
	(20,000)	(428,000)	2. None.
Iowa			
Rathbun Lake	2,541,000	2,028,000	
	(1,706,000)	(1,615,000)	1. None.
	(835,000)	(413,000)	2. None.
Kansas	1,456,000	2,014,000	1. Realignment of operation and maintenance funding to more realistically reflect work being accomplished.
Clinton Lake	(1,434,000)	(1,176,000)	
	(22,000)	(838,000)	2. Resurface road across dam and access roads.

APPROPRIATION TITLE: Operation and Maintenance, General, FY 1996

2. **Flood Control (Cont'd)**

a. Reservoirs (Cont'd)

State/Project Name	ESTIMATED OBLIGATIONS ($) FY 1995 TOTAL (Operations) (Maintenance)	FY 1996 TOTAL (Operations) (Maintenance)	Reason for Change and Major Maintenance Items 1. Reasons for change in Operations from FY 1995 to FY 1996 (10% +/-) 2. Major Maintenance Items Budgeted in FY 1996 (Threshold $500,000)
Kansas (Cont'd)			
Hillsdale Lake	780,000	1,128,000	
	(774,000)	(646,000)	1. Periodic inspection and report in FY 1995.
	(6,000)	(482,000)	2. None.
Kanopolis Lake	1,282,000	1,493,000	
	(1,205,000)	(1,156,000)	1. None.
	(77,000)	(337,000)	2. None.
Melvern Lake	1,615,000	1,567,000	1. Realignment of operation and maintenance funding to more realistically reflect work being accomplished.
	(1,560,000)	(1,194,000)	
	(55,000)	(373,000)	2. None.

MISSOURI RIVER DIVISION
JUSTIFICATION OF ESTIMATE

APPROPRIATION TITLE: Operation and Maintenance, General, FY 1996

2. **Flood Control (Cont'd)**

a. Reservoirs (Cont'd)

State/Project Name	ESTIMATED OBLIGATIONS ($) FY 1995 TOTAL	ESTIMATED OBLIGATIONS ($) FY 1996 TOTAL	Reason for Change and Major Maintenance Items
	(Operations) (Maintenance)	(Operations) (Maintenance)	1. Reasons for change in Operations from FY 1995 to FY 1996 (10% +/-) 2. Major Maintenance Items Budgeted in FY 1996 (Threshold $500,000)
Kansas (Cont'd)			
Milford Lake	1,562,000	1,886,000	
	(1,485,000)	(1,470,000)	1. None.
	(77,000)	(416,000)	2. None.
Perry Creek	1,811,000	1,919,000	
	(1,496,000)	(1,274,000)	1. Realignment of operation and maintenance funding to more realistically reflect work being accomplished.
	(315,000)	(645,000)	2. None.
Pomona Lake	1,857,000	1,939,000	
	(1,482,000)	(1,240,000)	1. Realignment of operation and maintenance funding to more realistically reflect work being accomplished.
	(375,000)	(699,000)	2. None.

MISSOURI RIVER DIVISION
JUSTIFICATION OF ESTIMATE

APPROPRIATION TITLE: Operation and Maintenance, General, FY 1996

2. **Flood Control (Cont'd)**

a. Reservoirs (Cont'd)

State/Project Name	ESTIMATED OBLIGATIONS ($) FY 1995 TOTAL	FY 1996 TOTAL	Reason for Change and Major Maintenance Items
	(Operations) (Maintenance)	(Operations) (Maintenance)	1. Reasons for change in Operations from FY 1995 to FY 1996 (10% +/-) 2. Major Maintenance Items Budgeted in FY 1996 (Threshold $500,000)
Kansas (Cont'd)			
Tuttle Creek Lake	1,617,000	2,202,000	
	(1,332,000)	(1,837,000)	1. Prepare dam safety evaluation report in FY 1996.
	(285,000)	(365,000)	2. None.
Wilson Lake	1,348,000	1,307,000	
	(1,254,000)	(1,036,000)	1. Realignment of operation and maintenance funding to more realistically reflect work being accomplished.
	(94,000)	(271,000)	2. None.
Missouri			
Little Blue River Lakes	850,000	1,403,000	
	(782,000)	(720,000)	1. None.
	(68,000)	(683,000)	2. Replace riprap and emergency rock stockpile.

MISSOURI RIVER DIVISION
JUSTIFICATION OF ESTIMATE

APPROPRIATION TITLE: Operation and Maintenance, General, FY 1996

2. **Flood Control (Cont'd)**

a. Reservoirs (Cont'd)

State/Project Name	ESTIMATED OBLIGATIONS ($) FY 1995 TOTAL	ESTIMATED OBLIGATIONS ($) FY 1996 TOTAL	Reason for Change and Major Maintenance Items
	(Operations) (Maintenance)	(Operations) (Maintenance)	1. Reasons for change in Operations from FY 1995 to FY 1996 (10% +/-) 2. Major Maintenance Items Budgeted in FY 1996 (Threshold $500,000)
Missouri (Cont'd)			
Long Branch Lake	818,000	731,000	
	(697,000)	(627,000)	1. Periodic inspection report in FY 1995.
	(121,000)	(104,000)	2. None.
Pomme de Terre	2,254,000	1,668,000	
	(1,523,000)	(1,310,000)	1. Realignment of operation and maintenance funding to more realistically reflect work being accomplished.
	(731,000)	(358,000)	2. None.
Smithville Lake	1,158,000	1,030,000	
	(979,000)	(813,000)	1. Realignment of operation and maintenance funding to more realistically reflect work being accomplished.
	(179,000)	(217,000)	2. None.

MISSOURI RIVER DIVISION
JUSTIFICATION OF ESTIMATE

APPROPRIATION TITLE: Operation and Maintenance, General, FY 1996

2. **Flood Control (Cont'd)**

a. Reservoirs (Cont'd)

State/Project Name	ESTIMATED OBLIGATIONS ($) FY 1995 TOTAL (Operations) (Maintenance)	ESTIMATED OBLIGATIONS ($) FY 1996 TOTAL (Operations) (Maintenance)	**Reason for Change and Major Maintenance Items** 1. Reasons for change in Operations from FY 1995 to FY 1996 (10% +/-) 2. Major Maintenance Items Budgeted in FY 1996 (Threshold $500,000)
Nebraska (Cont'd)			
Nebraska			
Harlan County Lake	1,517,000	1,488,000	
	(1,437,000)	(1,088,000)	1. Realignment of operation and maintenance funding to more realistically reflect work being accomplished.
	(80,000)	(400,000)	2. None.
Papillion Creek and Tributaries Lakes	677,000	742,000	
	(618,000)	(683,000)	1. Prepare embankment criteria report in FY 1996.
	(59,000)	(59,000)	2. None.
Salt Creek and Tributaries	679,000	811,000	
	(617,000)	(748,000)	1. Increase in dam instrumentation and water control management.
	(62,000)	(63,000)	2. None.

MISSOURI RIVER DIVISION
JUSTIFICATION OF ESTIMATE

APPROPRIATION TITLE: Operation and Maintenance, General, FY 1996

2. **Flood Control (Cont'd)**

a. Reservoirs (Cont'd)

State/Project Name	ESTIMATED OBLIGATIONS ($) FY 1995 TOTAL	ESTIMATED OBLIGATIONS ($) FY 1996 TOTAL	Reason for Change and Major Maintenance Items
	(Operations)	(Operations)	1. Reasons for change in Operations from FY 1995 to FY 1996 (10% +/-)
	(Maintenance)	(Maintenance)	2. Major Maintenance Items Budgeted in FY 1996 (Threshold $500,000)
North Dakota			
Bowman-Haley Lake	208,000	222,000	
	(205,000)	(220,000)	1. Prepare water control manual.
	(3,000)	(2,000)	2. None.
Pipestem Lake	384,000	405,000	
	(378,000)	(403,000)	1. None.
	(6,000)	(2,000)	2. None.
South Dakota			
Cold Brook Lake	243,000	190,000	
	(169,000)	(178,000)	1. None.
	(74,000)	(12,000)	2. None.
Cottonwood Springs Lake	173,000	184,000	
	(147,000)	(159,000)	1. None.
	(26,000)	(25,000)	2. None.

MISSOURI RIVER DIVISION
JUSTIFICATION OF ESTIMATE

APPROPRIATION TITLE: Operation and Maintenance, General, FY 1996

2. Flood Control Cont'd

a. Reservoirs Cont'd

State/Project Name	ESTIMATED OBLIGATIONS ($) FY 1995 TOTAL (Operations) (Maintenance)	 FY 1996 TOTAL (Operations) (Maintenance)	**Reason for Change and Major Maintenance Items** 1. Reasons for change in Operations from FY 1995 to FY 1996 (10% +/-) 2. Major Maintenance Items Budgeted in FY 1996 (Threshold $500,000)
South Dakota (Cont'd)			
Scheduling of Flood Control Reservoir Operations	631,000 (615,000) (16,000)	687,000 (676,000) (11,000)	1. Update hydrology and risk assessment for Jamestown Reservoir. 2. None.
SUBTOTAL - Reservoirs	27,361,000 (23,587,000) (3,774,000)	29,451,000 (22,073,000) (7,378,000)	

APPROPRIATION TITLE: Operation and Maintenance, General, FY 1996

2. Flood Control (Cont'd)

b. Channel Improvements, Inspections and Miscellaneous Maintenance

The program request of $832,000 provides for the annual inspection of completed works within the Division during the budget year.

State/Project Name	ESTIMATED OBLIGATIONS ($) FY 1995 TOTAL	FY 1996 TOTAL	Reason for Change and Major Maintenance Items
	(Operations) (Maintenance)	(Operations) (Maintenance)	1. Reasons for change in Operations from FY 1995 to FY 1996 (10% +/-) 2. Major Maintenance Items Budgeted in FY 1996 (Threshold $500,000)
Iowa			
Missouri River -	60,000	61,000	
Kenslers Bend, NE	(8,000)	(9,000)	1. None.
to Sioux City, Iowa	(52,000)	(52,000)	2. None.
Inspection of Completed Works	780,000	771,000	
	(780,000)	(771,000)	1. None.
	(0)	(0)	2. None.
Projects Periodically Maintained	195,000	0	
	(0)	(0)	1. None.
	(195,000)	(0)	2. None.

MISSOURI RIVER DIVISION
JUSTIFICATION OF ESTIMATE

APPROPRIATION TITLE: Operation and Maintenance, General, FY 1996

2. **Flood Control (Cont'd)**

b. Channel Improvements, Inspections, and Miscellaneous Maintenance

State/Project Name	ESTIMATED OBLIGATIONS ($) FY 1995 TOTAL (Operations) (Maintenance)	ESTIMATED OBLIGATIONS ($) FY 1996 TOTAL (Operations) (Maintenance)	Reason for Change and Major Maintenance Items 1. Reasons for change in Operations from FY 1995 to FY 1996 (10% +/-) 2. Major Maintenance Items Budgeted in FY 1996 (Threshold $500,000)
SUBTOTAL - Channel Improvements, Inspections, and Miscellaneous Maintenance	1,035,000 (788,000) (247,000)	832,000 (780,000) (52,000)	
TOTAL FLOOD CONTROL	28,396,000 (24,375,000) (4,021,000)	30,283,000 (22,853,000) (7,430,000)	

APPROPRIATION TITLE: Operation and Maintenance, General, FY 1996

3. Multiple Purpose Power Projects

The program request of $56,106,000 provides for the operation and maintenance of eight multi-purpose projects. Annual requirements are for the necessary operation and ordinary maintenance of project facilities; labor, supplies, materials and parts required for the day-by-day functioning of the projects; periodic maintenance, repairs and replacements; cultural resource needs; and contract law enforcement. The requested amount also includes application of special recreation use fees for recreation areas.

State/Project Name	ESTIMATED OBLIGATIONS ($) FY 1995 TOTAL (Operations) (Maintenance)	ESTIMATED OBLIGATIONS ($) FY 1996 TOTAL (Operations) (Maintenance)	Reason for Change and Major Maintenance Items 1. Reasons for change in Operations from FY 1995 to FY 1996 (10% +/-) 2. Major Maintenance Items Budgeted in FY 1996 (Threshold $500,000)
Missouri			
Harry S. Truman Dam and Reservoir	8,452,000	8,549,000	
	(4,451,000)	(4,585,000)	1. None.
	(4,001,000)	(3,964,000)	2. Repair turbine.
Stockton Lake	3,184,000	3,528,000	
	(2,228,000)	(2,080,000)	1. None.
	(956,000)	(1,448,000)	2. None.
Montana			
Fort Peck Dam and Lake	3,936,000	4,050,000	
	(2,780,000)	(2,829,000)	1. None.
	(1,156,000)	(1,221,000)	2. None.

MISSOURI RIVER DIVISION
JUSTIFICATION OF ESTIMATE

APPROPRIATION TITLE: Operation and Maintenance, General, FY 1996

3. Multiple Purpose Power Projects (Cont'd)

State/Project Name	ESTIMATED OBLIGATIONS ($) FY 1995 TOTAL (Operations) (Maintenance)	ESTIMATED OBLIGATIONS ($) FY 1996 TOTAL (Operations) (Maintenance)	Reason for Change and Major Maintenance Items 1. Reasons for change in Operations from FY 1995 to FY 1996 (10% +/-) 2. Major Maintenance Items Budgeted in FY 1996 (Threshold $500,000)
Nebraska			
Gavins Point Dam	5,327,000	6,363,000	
Lewis and Clark	(2,911,000)	(2,988,000)	1. None.
Lake, NE & SD	(2,416,000)	(3,375,000)	2. None.
Missouri River Master	488,000	500,000	
Water Control Manual,	(488,000)	(500,000)	1. None.
NE, IA, KS, MO, MT, ND	(0)	(0)	2. None.
North Dakota			
Garrison Dam,	9,140,000	9,154,000	
Lake Sakakawea	(4,923,000)	(5,182,000)	1. None.
	(4,217,000)	(3,972,000)	2. None.
South Dakota			
Big Bend Dam -	6,284,000	6,079,000	
Lake Sharpe	(3,241,000)	(3,607,000)	1. Increase in environmental compliance inspections.
	(3,043,000)	(2,472,000)	2. None.

MISSOURI RIVER DIVISION
JUSTIFICATION OF ESTIMATE

APPROPRIATION TITLE: Operation and Maintenance, General, FY 1996

3. Multiple Purpose Power Projects (Cont'd)

State/Project Name	ESTIMATED OBLIGATIONS ($)		Reason for Change and Major Maintenance Items
	FY 1995 TOTAL	FY 1996 TOTAL	
	(Operations) (Maintenance)	(Operations) (Maintenance)	1. Reasons for change in Operations from FY 1995 to FY 1996 (10% +/-) 2. Major Maintenance Items Budgeted in FY 1996 (Threshold $500,000)
South Dakota (Cont'd)			
Fort Randall Dam - Lake Francis Case	8,000,000	8,520,000	
	(4,267,000)	(4,926,000)	1. Increase in environmental compliance inspections and real estate management, perform hydrographic surveys, and develop biological opinion on endangered species.
	(3,733,000)	(3,594,000)	2. None.
Oahe Dam - Lake Oahe	9,349,000	9,363,000	
	(5,342,000)	(5,105,000)	1. None.
	(4,007,000)	(4,258,000)	2. Replace surge tank roof.
TOTAL - MULTIPLE PURPOSE PROJECTS	54,160,000	56,106,000	
	(30,631,000)	(31,802,000)	
	(23,529,000)	(24,304,000)	
GRAND TOTAL - MISSOURI RIVER DIVISION	87,456,000	92,457,000	
	(57,280,000)	(56,785,000)	
	(30,176,000)	(35,672,000)	

IMPACT OF NEW CRITERIA

Mr. MYERS. Thank you, Colonel. It appears from looking at your division that you aren't being impacted by the new criteria for construction particularly, that some of the other divisions have. That is unclear to me, because I don't know how you control main stem rivers if you don't have something to do with the tributaries flowing into them.

Do you have input about what kind of decision you will make. You have a number of smaller rivers that feed into the Missouri. How can you control siltation and control navigation levels if you don't have something to say about tributaries flowing into the main stem?

Colonel THUSS. I believe we do have things to say about tributaries. Our regulatory function comes into play when anyone proposes specific action that would affect a river or tributary.

MASTER WATER CONTROL MANUAL UPDATE

Mr. MYERS. If we don't have flood control upstream you will have a lot of siltation coming in. Won't it cause navigation problems? If you turn it over to the States entirely, which is the direction the administration is planning to go, it just seems to me like we are getting ourselves in over our heads. Your master water control manual—would this new criteria have impact on that plan?

Colonel THUSS. No, sir. We will continue with the study of the plan and discussion of all the alternatives.

Mr. MYERS. But if the new criteria should be implemented, would that affect the master plan in any way?

Colonel THUSS. Not that I can think of, sir.

Mr. MYERS. You have extended the time, the response time on the master plan, but are not ready to make recommendations at this point?

Colonel THUSS. The process that we will use, sir, is this: The comment period will be over 1 March. I will receive some additional written testimony postmarked 1 March, so we will be receiving information for the record until the 10th to the 15th of March. At that time I will come together with my staff to review our conclusions from the testimony that we have taken and the input that we have gotten in the comments. When I have reached a determination of fact and have some conclusions ready, I will proceed to brief the Administration on those results; and then we will take it from there. I expect that to be about the end of March or early April time frame.

Mr. MYERS. Why was revision required?

Colonel THUSS. As you recall, we went through a severe drought in the late 1980s, which caused us to consider whether we are operating the system in the correct manner with respect to all the project purposes. I am a proponent for all purposes of the main stem system, including flood control, navigation, hydropower, recreation, fish and wildlife enhancement, and water supply. We thought it was appropriate at that time to take another look at the system to see if we are operating it to maximize the benefits for all those project purposes.

Mr. MYERS. Did you go into the smaller streams in the study?

Colonel THUSS. No, sir. Our focus is on the main stem of the Missouri River. However, we do, because of the National Environmental Policy Act procedures, look at possible impacts on the Mississippi River.

Mr. MYERS. Anyone flying over and seeing the muddy water coming out of the Missouri into the Mississippi can see impacts. The Missouri doesn't require much dredging does it?

Colonel THUSS. No, sir. Because of the one foot per mile drop that we get, the current is fairly swift. The river essentially dredges itself, in most normal conditions.

Mr. MYERS. In your series of footnotes appears the phrase "realignment of operation and maintenance funding to more realistically reflect work being accomplished." What does that mean? Could you describe it so we could understand it?

Colonel THUSS. Sir, if you are asking me about the operation and maintenance budget, we have taken a hard look at what is absolutely necessary for the system in order to keep our maintenance program current. Our budget reflects this concern.

PROJECTS IMPACTED BY NEW CRITERIA

Mr. MYERS. Going back, are any of your projects projected to be impacted by this new Reinventing Government criteria that we heard about this morning?

Colonel THUSS. Certainly, they will be. As an estimate I would say that probably over 60 percent of our projects that are currently proposed—those in the General Investigation phase, not having gone to construction, would probably not move into the next phase under the proposed policy.

Mr. MYERS. Those are projects away from the main stem of the Missouri?

Colonel THUSS. Yes, sir.

RECREATION AREAS

Mr. MYERS. Does the Corps operate any recreation areas?

Colonel THUSS. Yes, sir.

Mr. MYERS. How many?

Colonel THUSS. I will get the number for the record, but it is quite a number.

[The information follows:]

RECREATION AREAS OPERATED BY MISSOURI RIVER DIVISION

The Missouri River Division operates a total of 206 recreation areas.

STATE OPERATION OF CORPS RECREATION AREAS

Mr. MYERS. Why haven't they been turned back to the States for operation?

Colonel THUSS. Sir, I don't know why they have not. I will comment for the record on which ones we have tried to return and haven't for a specific reason; but in general it is difficult sometimes for the State to pick up the responsibility, the maintenance of recreation areas, and there is no money in the State budget to pick up the cost.

[The information follows:]

STATE OPERATION OF CORPS RECREATION AREAS

In 1991, the Assistant Secretary of the Army for Civil Works initiated a pilot test to determine if states would be interested in having Corps-managed recreation areas transferred to them. In Missouri River Division, only Iowa, Kansas, and Missouri indicated a possible interest in the proposed transfer. Of these, Kansas was the only state to continue discussion with the Corps. Eventually the Corps offered to pay Kansas $30 million to accept the management of all Corps-managed recreation areas in the state. In April 1992, discussions were terminated because of state concerns about financing.

FUTURE BUDGET DECISIONS

Mr. MYERS. It doesn't sound like you will have money in your budget in the future either when you go on this new criteria. How can we operate a recreation area if you can't protect somebody from a flood? How can we justify it here? You are operating something for somebody in Nebraska or Missouri for recreation so they can go out boating, but we can't protect somebody downstream from flood damage.

Colonel THUSS. I think those are very difficult questions that will be answered. We are looking at reducing the Federal deficit, reduced spending over time. The Corps has had a proud tradition of expanding its work force to take on new work and also retracting its work force when there wasn't work there, based on the priorities that are set by you and the Administration. There are difficult choices to be made in the future.

Mr. MYERS. Really difficult. It is not getting easier. When Mr. Bevill and I came on the committee 25 years ago I thought it would be easier by now. He spent all the money before he left as Chair and all I have got is this gavel. It isn't what it used to be.

Mr. CHAPMAN.

Mr. CHAPMAN. Mr. Chairman, not only don't I have a gavel, I don't have a cup of coffee. I don't have anything.

I appreciate the Colonel's testimony and wish him the best of luck. He operates that area outside the confines of the great State of Texas, although I am sure that that area of the country is doing very well under his stewardship. I appreciate his testimony here today. I have no questions.

IMPACT OF THE MIDWEST FLOOD OF 1993 ON NON-FEDERAL LEVEES

Mr. MYERS. Going back to the flood of 1993, how many private non–Corps levees failed in your division, do you know?

Colonel THUSS. No, sir, I don't know.

Mr. MYERS. Provide that for the record.

[The information follows:]

NUMBER OF FAILED NON-CORPS LEVEES

There was a huge but undetermined number of non-Corps levees that failed. Missouri River Division received requests for Federal assistance on 278.

REBUILDING OF NON-CORPS LEVEES

Mr. MYERS. Are they being rebuilt? Give the committee a status on those if you would please.

Colonel THUSS. We have repaired a significant number, nearly 80——

Mr. MYERS. I am talking about those that were non-Corps construction.

Colonel THUSS. Yes, sir. There are still eight that are yet to be finished. Many others did not qualify for Federal assistance.

QUESTIONS FOR THE RECORD

Mr. MYERS. I think other Members may have questions they will provide for the record. We appreciate your testimony and the fine job you are doing and thank you for coming this afternoon.

[The information follows:]

QUESTIONS SUBMITTED BY CONGRESSMAN MYERS

FEDERAL ASSISTANCE CRITERIA FOR FLOOD CONTROL PROJECTS

Mr. MYERS. Do any of the flood control projects currently being studied or undergoing preconstruction engineering and design within the Missouri River Division meet the proposed criteria for Federal assistance?

Colonel THUSS. It is too early to determine how many of the studies currently underway will result in recommendations for projects that meet the proposed criteria. However, none of the four preconstruction engineering and design projects in the FY 96 budget request will meet all of the proposed criteria.

NON-FEDERAL LEVEE REPAIRS

Mr. MYERS. When will the remainder of the non-Federal levees damaged in the 1993 floods be repaired?

Colonel THUSS. Missouri River Division received 278 requests for Federal assistance on repairs to non-Federal levees. Qualifying criteria allowed us to proceed on only 85. We have completed 77. Eight others will be completed by 30 June 1995.

ADDITIONAL FUNDING NEEDS

Mr. MYERS. You state that in the event you expend funds faster than your historical pattern, you have "absolute" assurance from headquarters they will provide you with funds to cover contract awards and contractor earnings. Where would those additional funds come from?

Colonel THUSS. Experience has shown that additional funding may be required for projects that proceed at a faster rate than scheduled, while some other projects will have surplus funds due to delays in schedule for various reasons. Headquarters will reprogram available funds as necessary to ensure optimum progress on all projects.

GENERAL INVESTIGATIONS

OAHE DAM TO LAKE SHARPE, SOUTH DAKOTA

Mr. MYERS. What is the status of the Oahe Dam to Lake Sharpe, South Dakota, study?

Colonel THUSS. Ice analysis work by the Corps Cold Regions Research and Engineering Laboratory is scheduled to be completed in the spring of 1995. The analysis will provide information on the severity of future constraints on power generation from Oahe Dam. This information will be provided to the electric utility interests and the local communities to determine if further investigation is warranted. A public meeting is scheduled for the summer of 1995.

WILSON LAKE, KANSAS

Mr. MYERS. If existing storage at the Wilson Lakes, Kansas, project is reallocated for water supply purposes, what cost-sharing would be required of the local sponsors?

Colonel THUSS. In accord with the Water Resource Development Act of 1986, the non-Federal sponsors would be required to pay 100 percent of the original project construction and continuing annual operation and maintenance costs that would be allocated to water supply. The original construction cost portion would be factored up to current price levels.

BOXELDER, SPRING, AND DRY CREEKS, COLORADO

Mr. MYERS. What is the status of the Boxelder, Spring, and Dry Creeks project in Colorado?

Colonel THUSS. The local sponsor held an open house/public meeting on June 22, 1994, to obtain public comments. As a result, the sponsor no longer has an interest in pursuing the reconnaissance study or in continuing to the feasibility phase. The sponsor has decided to pursue other improvement alternatives without Federal involvement. The sponsor's views were incorporated into the reconnaissance report, and the study was completed on July 25, 1994.

TURKEY CREEK BASIN, KANSAS AND MISSOURI

Mr. MYERS. Why is a second modification to the feasibility cost-sharing agreement for the Turkey Creek Basin, Kansas and Missouri, project required?

Colonel THUSS. The second amendment to the Turkey Creek feasibility cost-sharing agreement is necessary due to the increase in cost and the revised completion date that are a result of incorporation of 1993 Midwest flood data into the study.

JAMES RIVER ENVIRONMENTAL, SD

Mr. MYERS. Why is it necessary to wait for completion of the local sponsor's negotiations with landowners in the Putney Slough area before proceeding with the James River Environmental study in South Dakota?

Colonel THUSS. The local sponsor, the James River Water Development District, is assessing their position before entering into a cost-sharing agreement for a feasibility study. Without a sponsor for the feasibility study, additional work cannot proceed.

BURT-WASHINGTON COUNTIES, NEBRASKA; LEWIS AND CLARK LAKE, NEBRASKA, AND LAKE SAKAKAWEA, NORTH DAKOTA

Mr. MYERS. What is the status of the Burt-Washington Counties, Nebraska, study and the Lewis and Clark Lake, Nebraska, and Lake Sakakawea, North Dakota, study?

Colonel THUSS. The Burt-Washington Counties reconnaissance study has been completed. A feasible flood reduction measure was identified, and the Burt-Washington Drainage District supports the solution. However, the sponsor has no funding at this time with which to cost-share a feasibility study. Moreover, the project fails to meet FY 96 budget request criteria.

We have completed the Lewis and Clark Lake, Nebraska, and Lake Sakakawea, North Dakota, reconnaissance study. No economically feasible projects could be identified.

BLUE RIVER BASIN, KANSAS CITY, MISSOURI

Mr. MYERS. What caused the delay in initiating preconstructing engineering and design for the Blue River Basin, Kansas City, Missouri, project?

Colonel THUSS. One tract of land was found to contain hazardous and toxic waste. This finding has delayed completion of the feasibility study until the extent of the material can be assessed and the local sponsor can determine how best to remediate the site or find an alternative alignment to avoid the property altogether.

RALSTON AND LEYDEN CREEKS, COLORADO AND ABERDEEN AND VICINITY, SOUTH DAKOTA

Mr. MYERS. What is the status of the Ralston and Leyden Creeks, Colorado, project and the Aberdeen and Vicinity, South Dakota, project?

Colonel THUSS. The completion of the feasibility study of Ralston and Leyden Creeks was delayed because of a request by the local sponsors to postpone the study until agreement is reached with the owners of Leyden Dam on the future use of the dam. This situation has not changed, so the Corps has put the study in a deferred status until some progress can be made in resolving it.

The Aberdeen and Vicinity, South Dakota, feasibility phase is scheduled for completion in the spring of 1995. Because of the small size of the project, it has been approved for inclusion in our Section 205, Continuing Authorities Program.

GENERAL INVESTIGATIONS CAPABILITIES

Mr. MYERS. The justification sheets indicate that work has been delayed in the Kansas City district as a result of an evaluation of its overall capability in the General Investigations program. Does the district have the capability to undertake all the work included in the fiscal year 1996 budget request?

Colonel THUSS. Yes, sir. The district recently reviewed and reevaluated its capability to accomplish its General Investigation program in FY 1995 and FY 1996. The schedules and funding requests included in the President's FY 1996 Budget reflect the results of this analysis.

CONSTRUCTION, GENERAL

MISSOURI RIVER FISH AND WILDLIFE MITIGATION, IOWA, NEBRASKA, KANSAS AND MISSOURI

Mr. MYERS. Why is there no completion date for the Missouri River Fish and Wildlife Mitigation project?

Colonel THUSS. There is no completion date for this project, or for many other projects, because reduced budget year and outyear ceilings were received from OMB on 19 January 1995, shortly before the printing deadline for justification materials to meet the 6 February 1995 release date for the FY 96 budget. Completion dates will be established after full evaluation of options for meeting outyear budget targets.

PERRY CREEK, IOWA

Mr. MYERS. When is the project cooperation agreement for the Perry Creek, Iowa, project scheduled to be executed?

Colonel THUSS. The Project Cooperation Agreement is scheduled to be executed by March 15, 1995.

Mr. MYERS. When will the first construction contract be awarded?

Colonel THUSS. The first construction contract is scheduled to be awarded in July 1995.

Mr. MYERS. What work has the local sponsor undertaken on the project thus far?

Colonel THUSS. The local sponsor, through an Architect-Engineer firm, has completed the design work for relocations on Phase I; they have performed some of the real estate acquisitions; and they have rebuilt three bridges.

BLUE RIVER CHANNEL, KANSAS CITY, MISSOURI

Mr. MYERS. Why are all the funds allocated to the Blue River Channel, Missouri, project in fiscal year 1995 being carried over to fiscal year 1996?

Colonel THUSS. We have experienced numerous planning delays on this project. Completion of plans and specifications for the next channel construction contract has been delayed due to lack of right-of-entry to sample and test materials along the channel alignment and the subsequent coordination required for disposal of unsuitable materials found. Also, negotiations with railroad companies for relocation of their facilities have taken much longer than anticipated. The reduced funding requirement as a result of these planning delays has resulted in a large programmed carryover of unobligated funds on this project.

Mr. MYERS. Are you confident you will be able to expend the funds requested for fiscal year 1996?

Colonel THUSS. Yes, sir. Coordination has been completed and agreement has been reached on the disposal of unsuitable material. Preparation of final plans and specifications for the next channel construction contract is underway. Two railroad relocation contracts have been awarded, and a third contract is at the railroad company for signature. Design work for a portion of the remaining railroad relocation work is complete, and the work will be included in the next channel construction contract.

Mr. MYERS. Why is the completion date for the project "being determined"?

Colonel THUSS. Sir, There is not a completion date reflected for this project because reduced budget and outyear ceilings were received from OMB shortly before the printing deadline for justification materials for the FY 96 budget. A completion date will be determined after full evaluation of options for meeting outyear budget targets.

MISSOURI NATIONAL RECREATIONAL RIVER

Mr. MYERS. Please provide more detail on activities planned for fiscal year 1996 for the Missouri National Recreational River project. What work are you performing on the project this year?

Colonel THUSS. Fiscal year 1996 construction activities for the Missouri National Recreational River consist of creating island nesting habitat areas for the least tern and the piping plover. These are endangered and threatened bird species, respectively. In addition to costs for actual construction, supplies and equipment will be purchased to support the endangered species program in this river reach.

MISSOURI RIVER LEVEE SYSTEM, IOWA, NEBRASKA, KANSAS AND MISSOURI

Mr. MYERS. When is the project cooperation agreement for Unit L385 of the Missouri River Levee System project scheduled to be executed?

Colonel THUSS. The Project Cooperation Agreement for Unit L385 is scheduled to be executed in October 1996.

Mr. MYERS. What is the schedule for award of the first construction contract for Unit L385?

Colonel THUSS. The first construction contract for Unit L385 is scheduled to be awarded in September 1997.

Mr. MYERS. What work has the local sponsor undertaken on the project thus far?

Colonel THUSS. The sponsor has been reviewing the draft Project Cooperation Agreement and assessing alternatives for financing the non-Federal project requirements.

OPERATION AND MAINTENANCE

REALIGNMENT OF OPERATION AND MAINTENANCE

Mr. MYERS. Please explain the following footnote, which appears alongside several projects, "Realignment of operation and maintenance funding to more realistically reflect work being accomplished."

Colonel THUSS. In accord with the Corps "National Operation and Maintenance Program of Improvement" dated 16 August 1993, the FY 1996 O&M budget guidance was revised to more accurately differentiate between "Operations" and "Maintenance" costs. As a result, we experienced a shift in costs between operations and maintenance.

INSPECTION OF COMPLETED WORKS PROGRAM

Mr. MYERS. Please describe the work accomplished under the Inspection of Completed Works Program.

Colonel THUSS. The Flood Control Act of 1936 and subsequent acts require local interests to furnish assurances that they will maintain and operate certain local protection projects after completion in accord with regulations prescribed by the Secretary of the Army. District Engineers are responsible for administration of these regulations within boundaries of their respective district. The Missouri River Division makes an annual inspection of all 398 flood control projects in our jurisdiction. A report is provided to the local sponsors to assist them in operating and maintaining their projects.

MISSOURI RIVER MASTER WATER CONTROL MANUAL

Mr. MYERS. Please bring the Committee up to date on your efforts to revise the Missouri River Master Water Control Manual.

Colonel THUSS. The Draft Environmental Impact Statement, or Draft EIS, for the Missouri River Master Water Control Manual Review and Update study was released for public review on September 2, 1994. A public comment period was initiated with the release of the Draft EIS and will be completed on March 1, 1995. There were 26 public workshops and hearings held in the Missouri River basin and in Memphis, Tennessee, New Orleans, Louisiana, and Quincy, Illinois. At the completion of the public comment period, all comments will be fully considered prior to the preparation of a final EIS.

Mr. MYERS. What is the preferred water control plan?

Colonel THUSS. The preferred water control plan for operating the dams on the Missouri River calls for higher spring flows in the lower river, a shortening of the normal commercial navigation season, and altered operations of the upper three reservoirs to enhance fish spawning and interior least tern and piping plover nesting habitat. The higher flows in the spring mimic the natural flow pattern of the river that existed prior to the construction of the control structures and the building of the dams. The expected result is increased value to habitat for native river fish, interior least tern and piping plover nesting areas, and wetlands adjacent to the river. Releases would still be reduced during significant flood events. The navigation season would continue to open on April 1. There would be higher target flows in the lower river until mid-June, then flows would be reduced to full service levels during the month of July. August through October flow levels would be set at minimum service levels. The normal navigation season would be reduced from eight to seven months, ending November 1. Rising lake levels in the reservoirs each spring would be rotated among the three largest reservoirs to enhance fish spawning and least tern and piping plover nesting. No changes are planned for the non-navigation releases or the permanent storage volume in the reservoir system of 18 million acre feet.

Mr. MYERS. Is authorization needed to change the water control plan?

Colonel THUSS. The question of additional authority depends on the water control plan selected. If we determine the selected water control plan cannot be implemented under our current authority, we will seek additional authorization.

MISSOURI RIVER MASTER WATER CONTROL MANUAL

Mr. MYERS. Will you seek the concurrence of Congress before changing operation of the system?

Colonel THUSS. Sir, substantial change in the operation of the Missouri River main stem reservoir system would not be implemented until the selected water control plan is published in a Final EIS and a Record of Decision is signed by the Assistant Secretary of the Army (Civil Works). Any potential operational changes of the main stem system will receive a complete Administration review before they are undertaken or proposed for authorization.

MISSOURI RIVER DIVISION NATIONAL RECREATION AREAS

Mr. MYERS. How many recreation areas does the Corps of Engineers operate within the Missouri River Division?

Colonel THUSS. The Missouri River Division operates a total of 206 recreation areas.

Mr. MYERS. How much is included in the fiscal year 1996 budget request for operation and maintenance of those facilities?

Colonel THUSS. The FY 1996 budget request for operation and maintenance of those facilities is $19,503,000.

MAIN STEM MISSOURI RIVER RESERVOIRS

Mr. MYERS. Is there currently adequate storage in the main stem Missouri River reservoirs to meet all authorized project purposes?

Colonel THUSS. Yes, sir. The current system storage in the six main stem reservoirs on February 17, 1995, totaled 55.4 million acre-feet, or MAF, with 95 percent of the Carryover Multiple Use Zone filled. This is the storage zone utilized during both short-term and extended drought periods. It is desirable to have this Carryover Multiple Use Zone at the 100 percent full level of 57.2 MAF on March 1, the beginning of each year's runoff season. Although the current storage of 55.4 MAF is slightly below the desired level, it is equal to the 1967-1994 long term average for this time of year and is greater than the 54.5 MAF storage required by water control criteria for the next decision point on March 15 to continue to provide full support to all authorized purposes.

CLOSING REMARKS

Mr. MYERS. The committee stands adjourned until 10 o'clock tomorrow morning.

WEDNESDAY, FEBRUARY 22, 1995.

SOUTHWESTERN DIVISION

WITNESSES

COL. JAMES PAUL KING, DIVISION ENGINEER

MICHAEL J. MOCEK, P.E., DIRECTOR, PROGRAMS MANAGEMENT DIRECTORATE

WILLIAM P. JOHNSON, JR., P.E., CIVIL ENGINEER, PROGRAMS MANAGEMENT DIRECTORATE

INTRODUCTION OF WITNESSES

Mr. MYERS. Committee will come to order.

We are pleased to have this morning the Southwestern Division. Colonel King, we are pleased to hear from you. Your entire statement will be in the record and you can proceed as you care. Welcome to the committee.

Colonel KING. Thank you, Mr. Chairman.

Mr. Chairman and distinguished Members of the committee, I am Colonel James Paul King, the Commander of the Southwestern Division. I have with me today on my right, Mr. Mike Mocek, the Director of my Programs Management Directorate, and on my left, Bill Johnson, who you know, also from Programs.

With your permission, I will submit for the record my status report on activities in the division and will briefly summarize that report.

Mr. MYERS. We are pleased to hear from you. Without objection, it is so ordered.

[The information follows:]

STATUS REPORT ON CIVIL WORKS ACTIVITIES IN THE SOUTHWESTERN DIVISION FISCAL YEAR 1996 TESTIMONY

COLONEL JAMES PAUL KING, DIVISION ENGINEER
22 February 1995

INTRODUCTION

The Southwestern Division area embraces all or part of eight states, an expanse that contains about 16.3 percent of the land (576,000 square miles) and 10.2 percent of the 1990 population (25.3 million) of the United States. The Division's Civil Works area is also defined by the following hydrologic basins: the portions of the Upper and Lower Colorado River Basins in western New Mexico, the entire United States portion of the Rio Grande Basin, the Texas Gulf Region (river basins mostly in Texas which drain into the Gulf), and the majority of the Arkansas, White and Red River Basins. The terrain varies from the eastern slopes of the Rocky Mountains in Colorado; to the arid regions of southern New Mexico; to the forested areas of Arkansas; to the tidal areas of southeast Texas. The Division is headquartered in Dallas, Texas, and includes five engineer districts, with offices located in Fort Worth and Galveston, Texas; Little Rock, Arkansas; Tulsa, Oklahoma; and Albuquerque, New Mexico.

FISCAL YEAR 1996 PROGRAM

The Fiscal Year 1996 Federal budget request for studies and projects in Southwestern Division is $325,364,000. Three percent of this amount will be used for General Investigations; 23 percent will be used for Construction, General; and 74 percent will be used for Operation and Maintenance activities at existing projects. The requested amount for Fiscal Year 1996 is six percent less than the $346,909,000 in Federal funds that have been, or will be, allocated to the Southwestern Division in Fiscal Year 1995.

GENERAL INVESTIGATIONS

The Fiscal Year 1996 budget request for the General Investigations Appropriation is $7,949,000, of which 33 percent is allocated to surveys and 67 percent to preconstruction engineering and design (PED) activities. These Federal funds, together with scheduled local sponsor cash contributions of $1,219,000, and unobligated carryover from the prior year of $72,000, will provide for continued planning engineering and design activities on high priority studies and projects in the Southwestern Division area. This total program of $9,240,000 for Fiscal Year 1996 is less than the $10,106,000, including local sponsors' cash contributions of $993,000, which are scheduled for use in Fiscal Year 1995.

FISCAL YEAR 1996 SURVEY PROGRAM

STUDY	FY 1996 FEDERAL REQUEST	LOCAL SPONSOR CASH CONTRIBUTION
ARKANSAS		
May Branch, Fort Smith	250,000	250,000
NEW MEXICO		
Espanola Valley, Rio Grande and Tributaries	118,000	118,000
Rio de Chama	232,000	0
Rocky Arroyo/Dark Canyon, Pecos River and Tributaries	45,000	0
NEW MEXICO, OKLAHOMA, COLORADO AND KANSAS		
Cimarron River and Tributaries	350,000	0
OKLAHOMA		
Optima Lake	100,000	0
TEXAS		
Buffalo Bayou and Tributaries, Addicks and Barker Reservoirs	50,000	0
Corpus Christi Ship Channel	100,000	100,000
Cypress Valley Watershed	50,000	50,000
GIWW - Corpus Christi Bay To Port Isabel	400,000	0
GIWW - High Island To Brazos River	300,000	0
GIWW - Port O'Connor to Corpus Christi Bay	150,000	0
Pecan Bayou, Brownwood	150,000	150,000
Plainview, Brazos River Basin	30,000	0
Upper Trinity River Basin	304,000	251,000
TOTAL STUDIES	$2,629,000	$ 919,000

SURVEY STUDIES

The Fiscal Year 1996 request of $2,629,000 in Federal funds for survey studies, together with local sponsor cash contributions of $919,000 on 6 studies, and unobligated carryover from the prior year of $72,000 on two studies, for a total program of $3,620,000, will provide for the study effort on 15 separate survey investigations located on major river basins throughout the division area. These studies are located as follows: one in Arkansas; three in New Mexico; one in the states of New Mexico, Oklahoma, Colorado and Kansas; one in Oklahoma; and 9 in Texas, as shown on the preceding table.

The requested funds, together with the non-Federal contributions, will provide for the initiation of three reconnaissance studies; the completion of four reconnaissance studies; the continuation into feasibility studies of two studies; the completion of two cost-shared feasibility studies; the continuation of one feasibility study at full Federal expense; and the continuation of three feasibility studies in partnership with local sponsors. This total program of $3,620,000 compares with a total program of $4,556,000 in Fiscal Year 1995 (Federal funds of $3,982,000 - plus local sponsor contributions of $574,000).

INITIATION OF RECONNAISSANCE STUDIES

The Fiscal Year 1996 request includes $600,000 in Federal funds for the initiation of three reconnaissance studies. These studies are: Cimarron River and Tributaries, in the multiple state area of New Mexico, Oklahoma, Colorado and Kansas; Optima Lake, Oklahoma; and Gulf Intracoastal Waterway - Port O'Connor to Corpus Christi Bay, Texas.

COMPLETION OF RECONNAISSANCE STUDIES

The Fiscal Year 1996 request includes $357,000 in Federal funds for the completion of four reconnaissance studies: Rio de Chama and Rocky Arroyo/Dark Canyon - both in New Mexico; and in Texas, Buffalo Bayou, Addicks and Barker Reservoirs; and Plainview, Brazos River Basin.

FEASIBILITY STUDIES

Included in the Fiscal Year 1996 request is $350,000 to be matched with $50,000 of non-Federal funds, for the continuation into the feasibility phase on two studies: Cypress Valley Watershed, and GIWW - High Island to Brazos River, both in Texas.

FEASIBILITY PHASE COMPLETION

The Fiscal Year 1996 request includes $422,000 to be matched with $369,000 of local sponsor cash contributions for the completion of two feasibility phase studies: Espanola Valley, New Mexico and Upper Trinity River Basin, Texas.

CONTINUATION OF FULL FEDERAL STUDIES

The Fiscal Year 1996 request includes $400,000 for continuation of the feasibility study, GIWW - Corpus Christi Bay to Port Isabel at full Federal expense.

CONTINUATION OF PARTNERSHIP STUDIES

The Fiscal Year 1996 request includes $500,000 for continuation of feasibility studies on three surveys. These surveys are being pursued on a 50-50 cost sharing basis with local sponsors in accordance with Public Law 99-662, the Water Resources Development Act of 1986. The requested funds, together with local sponsor cash contributions of $500,000 will provide for a Fiscal Year 1996 program of $1,000,000 for these studies. These studies are May Branch, Fort Smith, Arkansas; and two in Texas, Corpus Christi Ship Channel and Pecan Bayou, Brownwood.

PRECONSTRUCTION ENGINEERING AND DESIGN

The request for Fiscal Year 1996 of $5,320,000 in Federal funds, together with local cash contributions of $300,000 on one project, will provide for preconstruction engineering and design activities on ten projects. Funds are requested for completion of two projects and continuation of eight projects. The cost of this engineering and design effort will be cost shared with local sponsors in accordance with the cost sharing and financing concepts reflected in Public Law 99-662, the Water Resources Development Act of 1986. One project is located in each Kansas and New Mexico and eight in Texas. The projects and amounts requested for Fiscal Year 1996 are listed in the following table.

The funds requested for Fiscal Year 1996 compare with $5,131,000 of Federal funds allocated for this category for Fiscal Year 1995. This change primarily reflects the increased funding for the Houston-Galveston Navigation Channels and each of the other five continuing projects.

COMPLETION OF PED PROJECTS

The Fiscal Year 1996 request includes $870,000 for the completion of PED activities on two projects. These projects are Winfield, Kansas and Las Cruces, El Paso and Vicinity, New Mexico.

CONTINUING PED PROJECTS

The Fiscal Year 1996 request includes $4,450,000 for the continuation of PED activities on eight projects. These Texas projects are Brays Bayou, Houston; Cypress Creek, Houston; Dallas Floodway Extension; Greens Bayou, Houston; Gulf Intracoastal Waterway - Aransas National Wildlife Refuge; Houston-Galveston Navigation Channels; Neches River and Tributaries, Saltwater Barrier; and South Main Channel.

FISCAL YEAR 1996 PRECONSTRUCTION ENGINEERING AND DESIGN PROGRAM (PED)

PROJECT	FY 1996 REQUESTED AMOUNT
KANSAS	
Winfield	670,000
NEW MEXICO	
Las Cruces, El Paso and Vicinity	200,000
TEXAS	
Brays Bayou, Houston	500,000
Cypress Creek, Houston	300,000 *
Dallas Floodway Extension	500,000
Greens Bayou, Houston	300,000
Gulf Intracoastal Waterway - Aransas National Wildlife Refuge	750,000
Houston-Galveston Navigation Channels	1,100,000
Neches River and Tributaries, Salt Water Barrier	100,000
South Main Channel	900,000
TOTAL	$5,320,000

* Plus local sponsor cash contribution of $300,000.

CONSTRUCTION, GENERAL

The Fiscal Year 1996 request for Construction, General, in the amount of $76,047,000, provides for construction activities on 23 projects. These requested funds, together with scheduled cash contributions from the local sponsors of $8,072,000, and $40,934,000 in unobligated carryover from prior years that is being programmed for use in Fiscal Year 1996, gives a total construction program of $125,053,000. These funds will provide for a construction program that includes one new construction start, the continuation of construction on 19 projects and the funding for completion of three projects, all in Texas: Beals Creek, Big Spring; Sam Rayburn Spillway; and San Antonio Channel Improvement.

The proposed total program of $125,053,000 for the Southwestern Division in Fiscal Year 1996 compares with the $113,665,000 in allocated Federal funds and local sponsors' cash contributions of $3,974,000 for a total program of $117,639,000 in Fiscal Year 1995. There is one new construction start proposed for Fiscal Year 1996: Abiquiu Dam Emergency Gates, New Mexico.

For the last three Fiscal Years, 1992 - 1994, Southwestern Division has averaged about $106 million of Construction, General total expenditures. The current schedule is for $104 million to be expended in Fiscal Year 1995.

The following table of Fiscal Year 1996 Federal funds requests, shows four projects with no funds are being requested. These projects will be funded with appropriations from prior Fiscal Years which will be carried over into Fiscal Year 1996. The programmed carryover funds are sufficient to support planned Fiscal Year 1996 activities for these projects and no additional funds are requested or needed.

We believe all the new schedules shown in the justification sheets are achievable. The Division Engineer is personally held responsible for their accomplishment. In the event any additional funds are required on the four projects for which Fiscal Year 1996 funds are not requested, or on any budgeted construction project, HQUSACE has assured that funds will be reprogrammed to cover contract awards and contractor earnings. All budgeted items have been funded to their fullest extent.

NEW CONSTRUCTION START

The Fiscal Year 1996 request includes $1,200,000 for Abiquiu Dam Emergency Gates, New Mexico. These funds will allow the initiation of construction of a much needed correction and provide a second set of outlet gates to the project.

PROJECT COMPLETIONS

Included in the requested funds is $18,487,000 to complete construction on three projects. These projects, all in Texas are: Beals Creek, Big Spring; Sam Rayburn Spillway (Dam Safety); and San Antonio Channel Improvement. This last project has been under construction since 1957, or for 40 years.

FISCAL YEAR 1996 CONTINUING CONSTRUCTION PROGRAM

PROJECT	FY 1996 FEDERAL FUNDS REQUESTS	FY 1996 NON-FEDERAL CASH CONTRIBUTIONS	TOTAL FY 1996 NON-FEDERAL COSTS 1/
ARKANSAS			
Dardanelle Lock and Dam Powerhouse (Major Rehabilitation)	$ 3,500,000	$ 0	$ 0
ARKANSAS AND OKLAHOMA			
McClellan-Kerr Arkansas River Navigation System, Locks and Dam	6,000,000	0	0
COLORADO			
Alamosa	600,000	225,000	405,000
NEW MEXICO			
Abiquiu Dam Emergency Gates	1,200,000	0	0
Acequias Irrigation System	120,000	40,000	40,000
Alamogordo	100,000	0	0
Middle Rio Grande Flood Protection, Bernalillo to Belen	0	1,120,000	1,270,000
Rio Grande Floodway, San Acacia to Bosque Del Apache	0	0	0
OKLAHOMA			
Fry Creeks, Bixby	1,700,000	885,000	1,715,000
Mingo Creek, Tulsa	4,400,000	2,500,000	3,901,000
Tenkiller Ferry Lake (Dam Safety)	530,000	0	0
TEXAS			
Beals Creek, Big Spring	1,916,000	110,000	364,000
Channel to Victoria	3,100,000	1,020,000	4,126,000
Clear Creek	0	0	10,000,000
El Paso	400,000	29,000	1,989,000
GIWW - Sargent Beach	20,000,000 *	0	0
McGrath Creek, Wichita Falls	110,000	5,000	465,000
Ray Roberts Lake	3,500,000	0	0
Red River Basin Chloride Control	0	0	0
Sam Rayburn Spillway (Dam Safety)	9,474,000	100,000	100,000
San Antonio Channel Improvement	7,097,000	138,000	138,000
Sims Bayou, Houston	12,000,000	1,900,000	19,377,000
Waco Dam (Dam Safety Assurance)	300,000	0	0
TOTALS	$ 76,047,000	$8,072,000	$43,890,000

1/ Includes Lands, Easements, Rights-of-Way, Relocations and Disposal Areas and Cash Contributions, as applicable.

* Includes Inland Waterway Trust Funds

OPERATION AND MAINTENANCE

The Fiscal Year 1996 request for the Operation and Maintenance Appropriation for projects and activities in the Southwestern Division is $241,368,000. The requested funds will be divided among the major funding categories as follows: 23 percent for Channels and Harbors along the Texas Gulf coast; 10 percent for Locks and Dams along the McClellan-Kerr Arkansas River Navigation System; 36 percent for Flood Control; and 31 percent for Multiple Purpose Power Projects.

CHANNELS AND HARBORS

The Fiscal Year 1996 request for dredging and maintaining 13 projects along the Texas Gulf Coast is $54,633,000. The requested funds will provide for the continued maintenance of channel and harbor projects along the Texas Gulf Coast, including Freeport Harbor, the Gulf Intracoastal Waterway, the Houston Ship Channel and the Sabine-Neches Waterway. The Port of Houston is the second largest port in the United States and seven of the 48 largest ports in the U.S. depend on Southwestern Division for maintenance of the channels.

LOCKS AND DAMS

The request of $25,248,000 for Fiscal Year 1996 for Locks and Dams will provide for the operation of 13 Locks and Dams and the channel on the McClellan-Kerr Arkansas River Navigation System. Funds to provide for the operation of the remaining four locks are included in the request for each of four projects in the Multiple Purpose Power Projects category. These four locks are Dardanelle Lock and Dam, Arkansas; Ozark-Jeta Taylor Lock and Dam, Arkansas; Robert S. Kerr Lock and Dam and Reservoir, Oklahoma; and Webbers Falls Lock and Dam, Oklahoma. The navigation system, which consists of 13 locks and dams, four multiple purpose power projects and a channel between the structures, extends from the Mississippi River 445 navigation miles to the head of navigation at Catoosa, Oklahoma, which is about 15 miles east of Tulsa. In calendar year 1994, a record 11 million tons of cargo were moved on the system.

FLOOD CONTROL

The request of $86,989,000 for Fiscal Year 1996 will provide for the continued operation and maintenance of 70 flood control reservoirs, one other project (Estelline Springs Experimental Project, Texas) and two other flood control activities (scheduling reservoir operations and inspection of completed works). The 70 reservoirs are located as follows: six in Arkansas; two in

Colorado; eight in Kansas; one in Missouri; seven in New Mexico; 19 in Oklahoma; and 27 in Texas.

MULTIPLE PURPOSE POWER PROJECTS

The Fiscal Year 1996 funds requested for multiple purpose power projects in the Southwestern Division are $74,425,000. The requested funds will provide for the continued operation and maintenance of 18 projects. These projects are located as follows: six in Arkansas; one in Missouri; seven in Oklahoma; three in Texas; and one on the Texas-Oklahoma state line. These projects have a total installed capacity of 1,726.2 megawatts and produced almost 6.6 billion kilowatt-hours in Fiscal Year 1994. This electric production was 28 percent less than the record year 8.3 billion kilowatt-hours produced in Fiscal Year 1993, because of the lower river flows. This amount of electricity, generated pollution free in Fiscal Year 1994, would provide the yearly electricity to approximately 753,000 households or about 2 million people. These 18 projects, as a group, also provide one or more other benefits, including flood control, recreation, and water supply. Four of these projects, Dardanelle Lock and Dam, Arkansas; Ozark-Jeta Taylor Lock and Dam, Arkansas; Robert S. Kerr Lock and Dam and Reservoir, Oklahoma; and Webbers Falls Lock and Dam, Oklahoma, have locks that are an integral part of the McClellan-Kerr Arkansas River Navigation System.

PROTECTION OF NAVIGATION

The request for the Protection of Navigation category for Fiscal Year 1996 is $73,000. These funds will be used for project condition surveys on those projects for which maintenance is not scheduled in Fiscal Year 1996.

RECREATION

Outdoor recreation is a large part of the lifestyle in the Southwest. Nationwide, the Corps of Engineers is the second largest Federal provider of recreation opportunities. Southwestern Division receives 26 percent of the Corps' total visitation and provides recreational opportunities to approximately 97 million visitors each year at 98 operating projects located in seven states. This averages 266,000 people visiting Southwestern Division projects every day of the year.

FLOOD DAMAGES PREVENTED

The value of flood damages prevented by all Southwestern Division projects are calculated each year. In Fiscal Year 1994, these damages prevented totaled $6 billion. In the Southwestern Division, flood damages prevented during the lifetime of each project have now accumulated to $25 billion. Six major projects in the Dallas - Fort Worth area account for the majority of these damages prevented. The amount of damages these projects prevented in Fiscal Year 1994 was $5.3 billion and the life time cumulative amount is now $17 billion. These six projects are Benbrook Lake, the Fort Worth Floodway system, Grapevine Lake, Lewisville Dam, Ray Roberts Lake, and the Dallas Floodway system. The total Federal investment in these projects including Operation and Maintenance costs has been $487 million. This gives a return of $34.95 for every Federal $1.00 invested.

SMALL DISADVANTAGED BUSINESS

Southwestern Division (SWD) embraces the concepts and principles of the Small Disadvantaged Business (SDB) programs. Last year was a banner year for SWD and one in which some pride can be taken. Of the nine comparable Corps Divisions located within the continental United States that have district offices, SWD ranked at or near the top in all categories. The total amount of procurement dollars obligated, both Civil works funded and Military funded, was over $1.2 billion. Of this amount the SWD obligation in the SDB program of over $155 million or 12.8 percent of total obligations verses a goal of 8 percent, led the Corps. For the category of 8(a) contracts, SWD was second in the Corps with obligations of over $31 million. In the category of Historically Black Colleges and Universities/Minority Institutions, SWD lead the Corps with 87.5 percent of the total obligations of all Educational Institution contracts awarded in SWD. Another category is Women Owned Business in which SWD obligated over $25 million for 2.1 percent of all obligations verses a goal of 2 percent.

SUMMARY

In summary, the total Fiscal Year 1996 Southwestern Division program is $375,661,000 and consists of: the request of $325,364,000 in Federal funds, including Inland Waterway Trust funds; scheduled local sponsor cash contributions of $9,291,000; and $41,006,000 in unobligated carryover from prior years that is being programmed for use in Fiscal Year 1996. These funds will help in solving some of the problems and meet some of the high priority water resource needs of the area.

SOUTHWESTERN DIVISION—STATUS REPORT

Colonel KING. The Southwestern Division embraces all or parts of eight States, an expanse that is approximately 16 percent of the land area and more than 10 percent of the total population of the United States. Our division includes the Arkansas, White and Red River Basins, a portion of the Colorado River Basin in western New Mexico, the Rio Grande Basin and the Texas Gulf region.

The Southwestern Division headquarters is located in Dallas, Texas, and has five district offices.

FISCAL YEAR 1996 PROGRAM

Southwestern Division's fiscal year 1996 total Federal program is $366 million, which consists of $325 million as a budget request and $41 million as a fiscal year 1995 programmed carryover into fiscal year 1996. The General Investigations budget request, which is about 3 percent of our total request, will fund 25 study and design activities. Construction, General, represents 23 percent and will fund 23 projects. Operation and Maintenance makes up the remaining 74 percent, and that will fund 115 projects.

GENERAL INVESTIGATIONS

The $7.9 million requested in the GI budget will provide for planning and engineering activities on high priority studies and projects in the Survey and Preconstruction Engineering and Design categories.

SURVEY STUDIES

We request $2.6 million for 15 survey studies. I would like to highlight a few of these for the committee.

RIO DE CHAMA, NEW MEXICO

The $232,000 requested for the Rio de Chama, New Mexico, study will be used to complete that reconnaissance study.

ROCY ARROYO/DARK CANYON

PECOS RIVER AND TRIBUTARIES, NEW MEXICO

The Rocky Arroyo, Dark Canyon, Pecos River and Tributaries, New Mexico reconnaissance study will be completed with the $45,000 requested.

CYPRESS VALLEY WATERSHED, TEXAS

The Cypress Valley Watershed, Texas, cost-shared feasibility study will be initiated with the $50,000 requested. This diverse study will utilize a comprehensive approach for the entire watershed in addressing the region's water resource problems and its opportunities. These include water quality; habitat and wetland restoration; environmental protection; natural resource based tourism; and cultural and historic restoration.

UPPER TRINITY RIVER BASIN, TEXAS

The Upper Trinity River basin, Texas, study addresses the general flood reduction and other water-related problems in the Dallas–Fort Worth Metroplex area, where major flooding has occurred in three of the last four years. We request $304,000 to complete the cost-shared feasibility study.

PRECONSTRUCTION ENGINEERING AND DESIGN

There are 10 PED projects, totaling $5.3 million in our budget request, and I will briefly discuss a few of these projects.

CYPRESS CREEK, HOUSTON, TEXAS

The Cypress Creek, Texas, project is being funded as a continuing PED project. We are requesting $300,000 for this effort. Severe flooding was experienced in this area this past October.

DALLAS FLOODWAY EXTENSION, TEXAS

For the Dallas Floodway Extension, Texas, project, we request $500,000 to continue PED activities.

HOUSTON-GALVESTON NAVIGATION CHANNELS, TEXAS

Another design effort is the Houston-Galveston Navigation Channels, Texas, project located in the Galveston Bay System on the Texas Gulf Coast of Texas. The $1.1 million requested will be used to continue this economically important and environmentally sensitive project.

CONSTRUCTION, GENERAL

The fiscal year 1996 budget request for Construction, General, totals $76 million. This request, along with the fiscal year 1995 programmed carryover into 1996 of $41 million, provides a total Federal program for Construction, General, of $117 million. This program will be used to start construction on 1 project, to continue construction on 19, and to complete construction on 3.

CARRYOVER FUNDS

In the past, and for a variety of reasons, we have budgeted for schedules that were overly optimistic and in some cases requested more than we actually expended. This has resulted in a programmed carryover from the previous year. We have taken positive steps to reduce our fiscal year 1996 budget based on this carryover and our historical expenditure pattern. We believe these new schedules are achievable and I am personally held accountable for them.

Also, in fiscal year 1996, four of our continuing construction projects will be completely funded with programmed carryover funds from fiscal year 1995 and no additional funds are requested. This includes $1.6 million programmed for Clear Creek, Texas; $3.8 million for Middle Rio Grande Flood Protection, Bernalillo to Belen, New Mexico; $14.4 million for the Red River Basin Chloride Control, Texas and Oklahoma; and $6.7 million for the Rio Grande Floodway, San Acacia to Bosque del Apache, New Mexico, project.

In the event we expend funds faster than our present schedules for any construction project, we have been assured that funds will be reprogrammed by our Headquarters to cover our awards and contractor earnings. All budgeted items have been funded to their fullest extent.

COOPER LAKE AND CHANNELS, TEXAS

I am pleased to inform you that construction on the Cooper Lake and Channels, Texas, project, and the recreational facilities will be completed with fiscal year 1995 funds.

PROJECT COOPERATION AGREEMENTS

Also, during the past 12 months, we have executed Project Cooperation Agreements with our sponsors on five of our continuing construction projects. These include the Channel to Victoria, Texas; McGrath Creek, Wichita Falls, Texas; Alamosa, Colorado; Fry Creeks, Bixby, Oklahoma; and the Beals Creek, Big Spring, Texas projects. The $1.9 million requested for the Beals Creek project will complete construction in fiscal year 1996.

COMPLETED CONSTRUCTION

Construction will be completed on two other projects with funds budgeted in Fiscal Year 1996. This includes the $7.1 million for the San Antonio Channel Improvement, Texas, project, and $9.5 million for the Sam Rayburn Spillway, Dam Safety, Texas, project.

EL PASO, TEXAS

At the El Paso, Texas, flood control project, construction will continue with the $400,000 included in the Fiscal Year 1996 request.

MINGO CREEK, TULSA, OKLAHOMA

We have requested $4.4 million to continue construction of channel improvements and detention ponds for the Mingo Creek project in Tulsa, Oklahoma.

GULF INTRACOASTAL WATERWAY—SARGENT BEACH, TEXAS

We request $20 million, half of which will be obtained from the Inland Waterway Trust Fund, to continue construction of the Gulf Intracoastal Waterway, Sargent Beach, Texas, project. Erosion along this reach is threatening to breach and close the waterway.

SIMS BAYOU, HOUSTON, TEXAS

At the Sims Bayou project in Houston, Texas, the budget request of $12 million will provide for continuation of construction of the channel improvement.

DARDANELLE LOCK AND DAM POWERHOUSE, ARKANSAS

MAJOR REHABILITATION

The $3.5 million requested for the Dardanelle Lock and Dam Powerhouse, Major Rehabilitation project, in Arkansas will be used to continue the supply contract, to replace the turbines and to rewind the generators.

OPERATION AND MAINTENANCE, GENERAL

Our request for Operation and Maintenance in SWD is $241 million. These funds will be used on locks and dams at the McClellan-Kerr Arkansas River Navigation System; on channels and harbors along the Gulf coast; for multiple purpose power projects; and for flood control reservoir projects.

NAVIGATION LOCKS AND DAMS

The fiscal year 1996 request includes $25 million for the continued operation and maintenance of locks and dams on the McClellan-Kerr Navigation System. This system extends from the Mississippi River to the head of navigation on the Arkansas River near Tulsa, Oklahoma. A record 11 million tons of cargo were moved on the system this past year.

CHANNELS AND HARBORS

Also, $55 million is requested for the continued maintenance of 13 channel and harbor projects along the Gulf coast.

MULTIPLE PURPOSE POWER

We request $74 million for 18 multiple purpose power projects in the Southwestern Division. Last year, SWD hydroelectric power plants produced over 6.6 billion kilowatt hours, or enough electricity for 753,000 households and 2 million people.

FLOOD CONTROL

The fiscal year 1996 request includes $87 million for the continued operation and maintenance of 70 flood control reservoir projects.

FLOOD DAMAGES PREVENTED

The Southwestern Division experienced severe flooding in October of 1994, resulting in 36 counties in Texas being declared disaster areas. In Southwestern Division, the annual flood damages prevented by flood control projects far exceed the total amount of annual costs of all planning, engineering, construction and operation of these projects.

RECREATION

Our recreation projects are a major part of the Southwestern economy and its life-style. Recreation is the second largest industry in both Arkansas and Missouri and our projects are a significant part of that industry.

SUMMARY

In summary, the Southwestern Division's fiscal year 1996 total Federal program of $366 million, including Inland Waterway Trust Funds of $10 million, together with the local sponsor cash contributions of $9 million, will provide a total program of $375 million to continue high priority water resource development activities.

Mr. Chairman, this concludes my status report for the Southwestern Division. On a personal note, this will be my last testimony before your committee. I will retire from the U.S. Army this year, and I would just like to express my personal appreciation, Mr. Chairman, to the committee for the great service you do the Nation, and having said that, Mr. Chairman, I will now be glad to answer any questions that you or Members of the committee may have.

Thank you.

[CLERK'S NOTE.—The justification sheets for the Southwestern Division follow:]

Justification of Estimate for Civil Functions Activities
Department of the Army, Corps of Engineers
Fiscal Year 1996

SUMMARY, SOUTHWESTERN DIVISION

	FY 1995 Allocation	FY 1996 Request	Increase or Decrease
General Investigations			
Surveys	$ 3,982,000	$ 2,629,000	$ - 1,353,000
Preconstruction Engineering and Design	5,131,000	5,320,000	+ 189,000
Subtotal General Investigations	(9,113,000)	(7,949,000)	(- 1,164,000)
Construction, General			
Construction	90,083,000 1/	62,243,000 2/	- 27,840,000
Major Rehabilitation	9,343,000 3/	3,500,000 4/	- 5,843,000
Dam Safety Assurance	14,239,000	10,304,000	- 3,935,000
Subtotal Construction, General	(113,665,000)	(76,047,000)	(- 37,618,000)
Operation and Maintenance			
Project Operation	113,279,000	114,308,000	+ 1,029,000
Project Maintenance	110,852,000	127,060,000	+ 16,208,000
Subtotal Operation and Maintenance	(224,131,000)	(241,368,000)	(+ 17,237,000)
	==============	==============	===============
GRAND TOTAL, SOUTHWESTERN DIVISION	$ 346,909,000	$ 325,364,000	$ - 21,545,000

1/ Includes an estimated $4,251,000 to be derived from the Inland Waterway Trust Fund in FY 1995.

2/ Includes an estimated $10,000,000 to be derived from the Inland Waterway Trust Fund in FY 1996. Excludes $39,934,000 in unobligated carryover from prior years that is being programmed for use in FY 1996.

3/ Includes an estimated $2,946,000 to be derived from the Inland Waterway Trust Fund in FY 1995.

4/ Excludes $1,000,000 in unobligated carryover from prior years that is being programmed for use in FY 1996.

Study	Total Estimated Federal Cost	Allocation Prior To FY 1995	Allocation FY 1995	Tentative Allocation FY 1996	Additional To Complete After FY 1996
	$	$	$	$	$
1. SURVEYS - NEW					
a. Navigation Studies: None					
b. Flood Damage Prevention Studies:					
New Mexico, Oklahoma, Colorado and Kansas					
Cimarron River and Tributaries	560,000	0	0	350,000	210,000

A study of the Cimarron River and its tributaries, completed in 1970, indicated significant flood problems and a high level of local interest in finding solutions. The 1970 study found two multiple purpose projects, Englewood Dam and Lake on the Cimarron River and Skeleton Dam and Lake on Skeleton Creek, feasible and they were recommended for construction. However, the Skeleton project was not pursued because it would have been primarily a water supply project. The primary benefits that would have accrued to the Englewood project would have been chloride control benefits associated with the Arkansas River Basin Chloride Control project. Therefore, the Englewood project was not pursued because the chloride control project was not economically feasible at that time. Since the 1970 study, floods of major proportion have occurred in 1973, 1974, 1982, 1986, and 1993. The frequency of major flooding varies from about once in 5 years in the upper basin to once in 11 years in the lower basin. Minor floods occur about once every 2 years. The record flood, with a peak discharge of 162,000 cfs, occurred in 1986, causing approximately $23 million in property damages. The degree of flood damage generally increases from moderate in the upper basin to major in the lower basin. Damage categories are widespread including: crops, farm improvements, urban, commercial, industrial, transportation, and utilities. Average annual flood damages in the basin are estimated to be $9 million. Urban areas that experience flood damages are Stillwater, Guthrie, Dover, Kingfisher, Coyle, Dacoma, Aline, Drumright, and Waynoka, Oklahoma. Downstream, on the Arkansas River navigation system, flooding severely restricts navigation. When flows reach 60,000 cfs at Van Buren, Arkansas, barge tow operators experience significant cost increases and are forced to restrict navigation during these high-flow periods. The extensive flood damages and navigation delays have resulted in a high level of concern and support by local and state interests for studies of possible solutions. Alternatives would include multiple purpose reservoirs for flood control and other purposes, as well as levees, channel improvements, and non-structural measures. Construction of a flood control reservoir(s) in the Cimarron River Basin would complement flood control reservoirs in the Arkansas River Basin by helping to stabilize flows on the McClellan-Kerr Arkansas River Navigation System, increasing the number of navigable days, and providing additional transportation cost savings. In a January 1995 letter, the Oklahoma Water Resources Board expressed their desire and willingness to cost share in feasibility studies. A new study of the Cimarron River Basin is needed to consider solutions to the flood problems under current hydrologic and economic conditions and evaluate their impacts on fish and wildlife and other environmental resources. The reconnaissance report is scheduled to be completed in March 1997, which is 12 months after initiating the study.

Study	Total Estimated Federal Cost	Allocation Prior To FY 1995	Allocation FY 1995	Tentative Allocation FY 1996	Additional To Complete After FY 1996
	$	$	$	$	$
c. Shoreline Protection Studies: None					
d. Special Studies: None					
e. Comprehensive Studies: None					
f. Project Review Studies:					
Oklahoma					
Optima Lake	280,000	0	0	100,000	180,000

Optima lake is located on the North Canadian River, about 4.5 miles northeast of Hardesty in Texas County, Oklahoma. The lake was completed for flood control, water supply, recreation, and fish and wildlife in 1978. It was planned for flood control following major floods on the North Canadian River in October 1923, September 1941, and October 1946, with peak discharges of 32,000 cfs, 44,200 cfs, and 22,600 cfs, respectively. However, since completion of the dam, the conservation pool has never filled and the flood control storage has never been utilized. The flow of the North Canadian River in the Oklahoma panhandle has been decreasing since the mid-1960s, while precipitation has remained relatively normal, indicating the runoff characteristics over the basin have changed significantly. Two independent reports recognize the strong relationship between declining regional groundwater levels and streamflows, indicating the water supply potential of the project may not be as great as originally predicted. At present, the water supply storage in Optima Lake does not provide a dependable source. Obviously, the project is not providing recreation or water supply outputs as planned. Approximately 13,250 acres of land were acquired for the project, and much of this land, designated for flood control and recreation, is not being fully utilized and should be considered for other uses. A letter from the U.S. Fish and Wildlife Service, Tulsa Ecological Services Office, dated 3 June 1993, recognizes the need for studies to determine the feasibility of the project modification that would have positive impacts on fish and wildlife resources. In addition, the Oklahoma Water Resources Board and the Nature Conservancy have expressed an interest in alternative uses for project lands. Federal savings would be realized since the cost of operating and maintaining project facilities such as project office, roads, boat ramps, and recreation sites would be reduced. The annual allocation of O&M funds for the project is about $500,000. Manpower reductions and potential annual savings of up to $300,000 could be realized if the project were modified. An appraisal completed in Fiscal Year 1991 found a reconnaissance study is needed to determine the likelihood of feasible project modifications and whether non-Federal sponsorship and cost sharing of more detailed studies are appropriate. Potential solutions include reduction, reallocation or reassignment of flood control and conservation storage and excessing project lands to generate revenue for the U.S. Treasury; transfer of project lands to the U.S. Fish and Wildlife Service (USFWS)

Study	Total Estimated Federal Cost	Allocation Prior To FY 1995	Allocation FY 1995	Tentative Allocation FY 1996	Additional To Complete After FY 1996
	$	$	$	$	$

Oklahoma (Continued)

Optima Lake (Continued)

for fish and wildlife uses; dedication of some of the project lands to wetlands; transfer of project operation to USFWS or others; conversion to a flood control only project; and use by the state of Oklahoma for terminal storage as part of the Oklahoma Water Plan. The funds requested for Fiscal Year 1996 will be used to initiate the reconnaissance study. Work to be accomplished in Fiscal Year 1996 includes updating hydrologic and hydraulic data to assess the impacts of reduced runoff on project purposes and to determine a Federal interest and identify a non-Federal sponsor to proceed in conducting feasibility studies. No new construction is anticipated as a result of this study. The study would investigate the feasibility of reallocation of project purposes. The reconnaissance report is scheduled to be completed in March 1997, which is 12 months after initiating the study.

Study	Total Estimated Federal Cost	Allocation Prior To FY 1995	Allocation FY 1995	Tentative Allocation FY 1996	Additional To Complete After FY 1996
	$	$	$	$	$
Texas					
Gulf Intracoastal Waterway - Port O'Connor to Corpus Christi Bay	230,000	0	0	150,000	80,000

The study area consists of approximately 79 miles of the Texas section of the main channel of the Gulf Intracoastal Waterway (GIWW), extending from Port O'Connor to the J.F. Kennedy Causeway at Corpus Christi Bay. This is the third of five reaches to be investigated to provide a comprehensive framework for future decisions regarding the entire 423-mile main channel of the GIWW in Texas. The purpose of this study is to evaluate operational problems and address environmental concerns along this reach of the waterway. It should be noted that 31 miles of this reach of the waterway is within the critical habitat of the rare and endangered whooping crane. This segment is being addressed under a separate feasibility study for the Aransas National Wildlife Refuge and is therefore, excluded from consideration for the subject study reach. Navigational difficulties caused by frequent shoaling at various locations within the remainder of this reach, traffic congestion near Port O'Connor, and the lack of navigational aids and mooring facilities have been previously identified by users as areas of concern. The reconnaissance study will address these and other operational problems, identify potential beneficial uses of dredged material opportunities, identify environmental restoration opportunities, identify long-term disposal options, and develop the scope and funding requirements of the feasibility phase. The State of Texas is the local sponsor of the GIWW and continues to maintain a high interest in the waterway because of their responsibility to provide dredged material disposal areas and the economic importance of the waterway to the State. Fiscal Year 1996 study funds will be used to initiate the reconnaissance study. Study efforts will include the determination of the problems and opportunities in the study area, initiation of public involvement activities and coordination with resource agencies, and assess potential Federal interest. An additional $230,000 from the Operation and Maintenance, General Appropriations will be used for the reconnaissance study to initiate preparation of a long-term dredge material management plan of the existing project and also evaluate the existing Environmental Impact Statement. The reconnaissance study is scheduled for completion in March 1997, which is twelve months after initiating the study. The feasibility study will be 100 percent Federally funded. The GIWW is designated as part of the Nation's Inland Waterway System and therefore, qualifies for 50-50 cost sharing from the Inland Waterways Trust Fund for construction purposes. An initial appraisal of the entire 423-mile Texas Section of the GIWW was completed in November 1989. Potential solutions include restoration of areas previously impacted by project construction or subsequent maintenance activities, restore wetland habitat lost as a result of project usage, and dredging of circulation channels between designated dredged material disposal areas. Other structural solutions may involve channel widening to relieve traffic congestion at Port O'Connor, stabilizing of banks in critical locations to relieve channel shoaling problems, and the coordination and citing of mooring facilities for holding vessels during inclement conditions.

Study	Total Estimated Federal Cost	Allocation Prior To FY 1995	Allocation FY 1995	Tentative Allocation FY 1996	Additional To Complete After FY 1996
	$	$	$	$	$
2. SURVEYS - CONTINUING					
a. Navigation Studies:					
Texas					
Corpus Christi Ship Channel	3,143,000	298,000	145,000	100,000	2,600,000

The Corpus Christi Ship Channel is a Federally constructed deep-draft navigation project serving the ports at Harbor Island, Ingleside, and Corpus Christi in Nueces County. The existing project consists of approximately 40 miles of channels; a jettied entrance channel 45 to 47 feet deep and 600 to 700 feet wide from the Gulf of Mexico; the Corpus Christi Ship Channel with a depth of 45 feet and a width of 400 feet; and a branch channel referred to as the La Quinta Channel with a depth of 45 feet and a width of 300 feet. Tonnage transported on the Corpus Christi Ship Channel totaled over 60 million tons in 1992 and averaged that amount over the past five years. Local interests desire that the existing channel to Corpus Christi be deepened to 50 feet or greater for use by larger vessels, resulting in more efficient movement of commodities and, therefore, decreased shipping costs. The existing 45-foot project was designed to accommodate 59,000 dead weight ton (DWT) vessels with a loaded draft of 41 feet. Large vessels, 100,000 DWT and greater, regularly use the channel. These larger vessels could be loaded to greater depths, offering substantial reductions in vessel operating costs if additional channel depth was available. The major commodity to be shipped on this waterway is crude oil. The reconnaissance study was initiated in September 1993 and a Reconnaissance Report was completed in September 1994 and is currently under review and coordination at higher headquarters. The reconnaissance study evaluated potential port commerce, transportation savings, construction costs, and dredged material disposal options and required complex economic considerations involving international grain and crude oil projections as well as the assessment of potential environmental impacts in a sensitive estuarine system. The Reconnaissance Study has demonstrated that deepening the project to 50 feet is economically justified. Construction of this alternative would cost about $152 million and produce a benefit cost ratio of 2.5. Benefits generated by this project are high priority, commercial navigation benefits which are in accord with current administration policy. The local sponsor for the study is the Port of Corpus Christi Authority. A letter was received from the local sponsor in September 1994 indicating their continued interest in the study and their willingness to cost share future studies and other requirements of the 1986 Water Resources Development Act concerning navigation projects with depths in excess of 45 feet. A Feasibility Cost Sharing Agreement and Initial Project Management Plan are being finalized. It is anticipated that the Feasibility Cost-Sharing Agreement will be executed in June 1995.

Fiscal Year 1995 funds will be used to complete the Reconnaissance Phase to be in accord with policy and the Feasibility Cost Sharing Agreement is executed. Funds requested for Fiscal Year 1996 will be used to initiate the feasibility phase

Study	Total Estimated Federal Cost	Allocation Prior To FY 1995	Allocation FY 1995	Tentative Allocation FY 1996	Additional To Complete After FY 1996
	$	$	$	$	$

Texas (Continued)

Corpus Christi Ship Channel (Continued)

of the study if the reconnaissance report is certified. The preliminary estimated cost of the feasibility phase is $5,400,000 which will be shared on a 50-50 percent basis by the Federal and non-Federal interests. Up to one half of the non-Federal share may be in-kind services. A summary of the study cost sharing is as follows:

Total Estimated Study Cost	$ 5,843,000
Reconnaissance Phase (Federal)	443,000
Feasibility Phase (Federal)	2,700,000
Feasibility Phase (non-Federal)	2,700,000

The reconnaissance phase is scheduled for completion in June 1995. A completion date is being determined for this feasibility study.

Study	Total Estimated Federal Cost	Allocation Prior To FY 1995	Allocation FY 1995	Tentative Allocation FY 1996	Additional To Complete After FY 1996
	$	$	$	$	$
b. Flood Damage Prevention Studies:					
Arkansas					
May Branch, Fort Smith	740,000	0	30,000	250,000	460,000

The stream known as May Branch lies entirely within the city limits of Fort Smith, Arkansas, which has a population of 73,000. The drainage area of May Branch is 5.3 square miles. May Branch starts out as an open channel that flows into a covered conduit storm sewer, constructed in 1910, which ends at the P Street pumping station, constructed by the Corps in 1948, that has an outlet through the Fort Smith Levee into the Arkansas River. The storm sewer was generally adequate until the 1930's when increased urbanization resulted in the runoff routinely exceeding the capacity of the storm sewer, the only outlet for the basin. Flood runoff flows overland until it eventually ponds behind the levee until evacuated. Average annual flood damages in the May Branch Basin are estimated at $5,840,000. During the spring of 1990, an estimated 26 commercial and 44 residential units were inundated by an approximate 50-year flood event which caused an estimated $2.5 million in damages. Numerous floods have occurred previous to the May 1990 event including the flood of August 1971. Alternative plans to be investigated to alleviate the flooding include: a two-mile long tunnel under the downtown section of Fort Smith, channel widening, pump stations, detention basins, parallel storm sewers, and additional relief openings through the levee. The May Branch reconnaissance study was initiated under Section 205 of the Flood Control Act of 1948, as amended, of the Continuing Authorities Program. Because the scope and complexities of the flood problems were determined to be beyond the limits of a Section 205 study, the May Branch study was incorporated into the Arkansas River Wetlands and Flood Control reconnaissance study. This reconnaissance study investigated both the flooding problems and restoration of fish and wildlife resources, which are both in accord with Administration policy. The reconnaissance report recommended that the identified restoration projects be pursued under Section 1135 of the Water Resources Development Act of 1986. Also, the report recommended Federal participation in feasibility studies for flood control in the May Branch area of Fort Smith, Arkansas. The city of Fort Smith, Arkansas, will be the sponsor for the May Branch feasibility study and project. The Feasibility Cost-Sharing Agreement is scheduled for signing in August 1995. Representatives of the city of Fort Smith have stated numerous times since 1 January 1994 that they were willing to start the May Branch feasibility phase as soon as the construction claim on another Corps cost-shared project on Mill Creek is finalized. This Mill Creek construction claim should be settled by 15 June 1995.

Fiscal Year 1995 funds are being used to continue into the feasibility phase of the study as the reconnaissance report was certified to be in accord with policy. The funds requested for Fiscal Year 1996 will be used to continue the feasibility phase of the study. The preliminary estimated cost of the feasibility phase is $1,480,000, which is to be shared on a 50-50 percent basis by Federal and non-Federal interests. Up to one half of the non-Federal share may be in-kind services. A

Study	Total Estimated Federal Cost	Allocation Prior To FY 1995	Allocation FY 1995	Tentative Allocation FY 1996	Additional To Complete After FY 1996
	$	$	$	$	$

Arkansas (Continued)

May Branch, Fort Smith (Continued)

summary of study cost sharing is as follows:

Total Estimated Study Cost	$1,480,000
Reconnaissance Phase (Federal)	1/
Feasibility Phase (Federal)	740,000
Feasibility Phase (Non-Federal)	740,000

1/ This work was performed under the Section 205 Continuing Authorities Program and subsequently combined with the Arkansas River Wetlands and Flood Control, Arkansas, reconnaissance study.

The reconnaissance studies were completed in October 1992. The reconnaissance phase is scheduled for completion in August 1995. A completion date is being determined for this feasibility study.

Study	Total Estimated Federal Cost $	Allocation Prior To FY 1995 $	Allocation FY 1995 $	Tentative Allocation FY 1996 $	Additional To Complete After FY 1996 $
New Mexico					
Espanola Valley, Rio Grande and Tributaries	815,000	647,000	50,000	118,000	0

The Espanola Valley lies at the confluence of the Rio Grande, the Rio Chama, the Santa Cruz River, and several other lesser streams in north-central New Mexico. Española, the largest community in the valley, is located 85 miles south of the New Mexico-Colorado state line and 25 miles north of Santa Fe. Six Indian pueblos are located within the study area: San Juan, Santa Clara, Nambe, Pojoaque, San Ildefonso, and Tesuque. The rapid growth and development along the Rio Grande and its tributaries have increased the potential for flooding in many locations. Eighteen floods, caused by summer rainfall or spring snowmelt, have been recorded within the study area since 1865; the most recent floods occurred in 1958, 1969, 1970, 1978, 1987 and 1991. The floods of 1969 and 1970 damaged residential and commercial buildings, bridges, crops, and irrigation facilities in Española and surrounding towns and Indian Pueblos. The two floods caused damages estimated at $1,850,000 and $940,000 (October 1994 prices) respectively. The reconnaissance report concluded there are economically feasible levee plans for Española which are in accordance with Administration policy. The project described in the report has an estimated first cost of $5.2 million (uninflated at December 1991 price levels) and a benefit/cost ratio of 1.3:1. The City of Española, State of New Mexico and Santa Clara Pueblo are highly supportive of the proposed project and feasibility study. A Feasibility Cost Sharing Agreement was signed in February 1993 by the local sponsor, the City of Espanola. Feasibility studies were initiated in February 1993.

Fiscal Year 1995 funds are being used to continue the feasibility phase of the study. The funds requested for Fiscal Year 1996 will be used to complete the feasibility phase. The estimated cost of the feasibility phase is $1,020,000, which is to be cost shared on a 50-50 percent basis by Federal and non-Federal interests. Up to one half of the non-Federal share may be in-kind services. A summary of study cost sharing is as follows.

Total Estimated Study Cost	$1,325,000
Reconnaissance Phase (Federal)	305,000
Feasibility Phase (Federal)	510,000
Feasibility Phase (non-Federal)	510,000

The reconnaissance phase was completed in February 1993. The feasibility study is scheduled for completion in May 1996.

Study	Total Estimated Federal Cost $	Allocation Prior To FY 1995 $	Allocation FY 1995 $	Tentative Allocation FY 1996 $	Additional To Complete After FY 1996 $
New Mexico (Continued)					
Rio de Chama, Abiquiu Dam to Espanola	400,000	0	168,000 1/	232,000	0

1/ $22,000 of the amount available for FY 1995 is scheduled as programmed carryover into FY 1996.

The study area is located in Rio Arriba county in northern New Mexico in the Rio Chama drainage area from Abiquiu Dam to the confluence of the Rio Chama and the Rio Grande, approximately a 31 mile reach. The Rio Chama watershed covers 3,159 square miles of which 2,146 are controlled by Abiquiu Dam. Grazing and commercial timber comprise approximately 96 percent of the total Rio Arriba county area. In the area of Abiquiu Dam and the lower Rio Chama, grazing land and cropland are the principal uses. Nearly all of the land in the lower Rio Chama flood plain is irrigated cropland. Four major concerns in the Rio Chama are: potential flooding from water releases from Abiquiu Dam, due to the limited channel capacity; erosion damages; environmental quality; and the potential inability to maintain adequate channel capacity to make water deliveries in accordance with the Rio Grande Compact and international treaty obligations. During the past several years, it has become increasingly difficult to make water deliveries in accordance with the Rio Grande Compact because of the decreased channel capacity and bank erosion. Since the construction of Abiquiu Dam, flow in excess of 200% of normal have entered the Abiquiu reservoir in 1978, 1980, 1985, 1986 and 1987. During this same period the channel downstream of the dam has lost at least 30% of its capacity due to erosion and the deposition process. If the channel capacity continues to decrease, the releases from Abiquiu mandated by treaty with Mexico and by the Rio Grande Compact will cause flood damage between Abiquiu and Española, NM. Currently flooding occurs when local thunderstorms add to the mandatory releases. The investigation will evaluate the need for flood control and erosion prevention measures and potential changes in the operation of Abiquiu Dam to improve environmental quality and maintain water delivery requirements. Both the residents of Rio Arriba county and the New Mexico Interstate Stream Commission have expressed support for this study. The Interstate Stream Commission understands the cost-sharing requirements for feasibility studies and potential construction projects and has expressed a willingness to participate in further studies. The funds requested for Fiscal Year 1996 will be used to complete the reconnaissance study in February 1996 which is 12 months after initiating the study.

Study	Total Estimated Federal Cost	Allocation Prior To FY 1995	Allocation FY 1995	Tentative Allocation FY 1996	Additional To Complete After FY 1996
	$	$	$	$	$
New Mexico (Continued)					
Rocky Arroyo/Dark Canyon, Pecos River and Tributaries	490,000	180,000	265,000	45,000	0

Carlsbad, New Mexico, is located in Eddy County, along the banks of the Pecos River, in the southeastern corner of the State. The 1990 population of Carlsbad was approximately 25,000. Most flooding problems at Carlsbad come from three separate sources: the Pecos River, Dark Canyon, and Rocky Arroyo. The recent completion of Brantley Dam by the Bureau of Reclamation controls the majority of flood flows coming from the Pecos River main stem. However, Rocky Arroyo and Dark Canyon both flow into the Pecos River below Brantley Dam and pose serious flood problems to Carlsbad. Intense thunderstorms can produce a wall of water converging on the City from Dark Canyon, Rocky Arroyo, or both. Approximately 2,700 acres of urban land lies within the Standard Project Floodplain at Carlsbad, including much of the downtown business district and heavily populated residential areas. A Reconnaissance Report, completed in 1987, estimated average annual flood damages at $3.4 million for Dark Canyon alone. Recorded floods originating on Dark Canyon occurred in 1906, 1907, 1911, 1915, 1916, 1919, 1925, 1941, 1966, and 1986. Floods originating upstream of Carlsbad from the Pecos River main stem, Rocky Arroyo, or both, occurred in 1904, 1905, 1915, 1916, 1941, 1966, and 1986. The flood of 1941 claimed 20 lives in Carlsbad, and the flood of 1986 claimed one life.

The Mayor of Carlsbad, by letter dated April 24, 1992, requested the Corps of Engineers investigate the potential for a comprehensive flood control plan at Carlsbad including Dark Canyon, the Pecos River and Rocky Arroyo. The City, as the potential Local Sponsor, understands the cost-sharing requirements for the potential Feasibility Phase of the study and indicates a willingness to cost share. The reconnaissance study will define the flood threat to Carlsbad from Rocky Arroyo, Dark Canyon, and the Pecos River basin, and formulate various plans to address the flooding problems. It will also determine whether a Federal interest exists in any of the evaluated plans and recommend a course of action to be taken. The reconnaissance study and its anticipated outputs are in accord with administration policy.

Funds requested for Fiscal Year 1996 will be used to complete the reconnaissance study. The reconnaissance phase is scheduled to be completed in January 1996.

Study	Total Estimated Federal Cost	Allocation Prior To FY 1995	Allocation FY 1995	Tentative Allocation FY 1996	Additional To Complete After FY 1996
	$	$	$	$	$
Texas					
Pecan Bayou, Brownwood	1,000,000	550,000	150,000	150,000	150,000

Pecan Bayou, a major tributary to the Colorado River, is located in Callahan, Coleman, and Brown Counties of Texas. Major flood damage centers along the bayou include Lake Brownwood and the city of Brownwood. The flood of April-May 1990, the worst in Brownwood's history, caused two deaths and forced the evacuation of hundreds from their homes. Flood damages totaled over $10 million within the city, with a substantial amount of damages around Lake Brownwood as well. A second flood occurred in December 1991. Damages were somewhat less than those of the 1990 flood within the city; 213 residences and 40 businesses are known to have incurred damage as a result of flood inundation. However, the flooding of residences around Lake Brownwood was greater than the previous flood, with flooding depths averaging 12-15 inches higher.

Pecan Bayou Lake, Texas, a multipurpose project authorized by the Flood Control Act of 1968, was reevaluated during the reconnaissance study. It was found to lack sufficient flood inundation reduction benefits to justify the authorized project and thus will not be further considered. Instead, two channel modification projects within the city of Brownwood were found to be in the Federal interest, and were recommended for further detailed study. One project extends along Pecan Bayou from U.S. 377 downstream for a distance of approximately 7,500 feet. The second project is located along Willis Creek, a major tributary, from near the confluence with Pecan Bayou to a point approximately 18,500 feet upstream. Collectively, these two projects would reduce the average annual flood damages in Brownwood by approximately $1.5 million. The city of Brownwood has most recently expressed their support for the feasibility study by letter dated March 23, 1994. A FCSA has been negotiated and will be executed in January 1995.

Fiscal Year 1995 funds are being used to continue into the feasibility phase of the study which is to be shared on a 50-50 percent basis by Federal and non-Federal interests. Up to one half of the non-Federal share may be in-kind services. The funds requested for Fiscal Year 1996 will be used to continue the feasibility phase of the study. A summary of the study cost sharing is as follows:

Total Estimated Study Cost	$1,450,000
Reconnaissance Phase (Federal)	550,000
Feasibility Phase (Federal)	450,000
Feasibility Phase (Non Federal)	450,000

The Reconnaissance Phase was completed in January 1995. A completion date is being determined for this feasibility study.

Study	Total Estimated Federal Cost	Allocation Prior To FY 1995	Allocation FY 1995	Tentative Allocation FY 1996	Additional To Complete After FY 1996
	$	$	$	$	$
Texas (Continued)					
Plainview, Brazos River Basin	480,000	100,000	350,000	30,000	0

The study area is located in Plainview, Hale County, Texas and its environs. The study area includes Running Water Draw and several playa lakes. The headwaters of Running Water Draw are located in the eastern edge of New Mexico near Clovis, from whence it flows southeasterly into the state of Texas. It traverses the southern portion of the city of Plainview on a course to its confluence with the White River and subsequent confluence with the Salt Fork of the Brazos River. The playa lakes are located on the north edge of the city. Storm flows originating north of the city flow through the playas and pass unrestrained through the eastern portion of the city, emptying into Running Water Draw east of the city. The watershed for Running Water Draw has a drainage area of 1,291 square miles, an overall length of 110 miles, and an average width of 12 miles. The watershed for the playa lakes contains approximately 22.6 square miles with an overall length of 6 miles and an average width of 4 miles. Plainview has an estimated population (1990) of 21,700 and has experienced severe loss of physical property and injuries to its residents as a result of flooding along Running Water Draw and outflows from the playa lakes. Significant flooding has occurred in Plainview in 1941, 1951, 1960, 1965, 1975, 1977, and 1985. The 1941 flood resulted in one life being lost and 50 homes being damaged. The 1951 flood damaged 85 homes. Over 1,000 people were displaced from their homes in the 1960 flood. The most recent flood occurred in 1985 as a result of an unprecedented two-day rainfall of 6.4 inches. Street and highways were inundated and flooding was also reported in homes and businesses. Stranded vehicles were destroyed and numerous livestock were drowned in the flood. Homes, streets, and parks were flooded significantly, and Interstate 27 was closed. As a result of the 1960 flood, a study was performed and recommended a multi-agency plan consisting of seven upstream Soil Conservation Service (SCS) reservoirs on Running Water Draw, and a Corps channel improvement on both Running Water Draw and the playa lakes in the city. This plan was authorized by Section 201 of Public Law 89-298 in December 1970. Phase I GDM studies completed in 1977 revealed that, with the seven SCS reservoirs having been constructed, the Corps channel was no longer economically justified as a last added element. This project was Deauthorized by PL 99-662 in November 1986. Recently completed hydrologic studies performed under the Federal Emergency Management Agency's Flood Insurance Program indicate that the flood danger is much greater than predicted in the previous flood control studies due in part to significant development in the city. The 100-year floodplain is now much larger than previously estimated, and consequently, a significant flood hazard still exists warranting further flood control studies. The city of Plainview has submitted letters on December 30, 1988; March 14, 1989; March 14, 1990; May 23, 1991; and June 24, 1992 requesting that the Corps of Engineers perform a reconnaissance study of their flooding problems and indicated its intent to cost share equally in the cost of subsequent feasibility phase studies.

Fiscal Year 1996 funds are being used to fully fund the reconnaissance phase at full Federal expense. The reconnaissance phase is scheduled for completion in November 1995.

Study	Total Estimated Federal Cost	Allocation Prior To FY 1995	Allocation FY 1995	Tentative Allocation FY 1996	Additional To Complete After FY 1996
	$	$	$	$	$
Texas (Continued)					
Upper Trinity River Basin	4,810,000	4,106,000	400,000	304,000	0

The Upper Trinity River Basin extends upstream from the confluence of the East Fork and the mainstem of the Trinity River, has a drainage area of approximately 8,100 square miles and includes the Dallas-Fort Worth, Texas, Metroplex. This area had an estimated population in 1990 of over 3.9 million. Existing Corps of Engineers projects providing flood control and serving allied purposes include six multiple-purpose lakes (Benbrook, Grapevine, Joe Pool, Lavon, Lewisville and Ray Roberts Lakes) and four floodway projects (Fort Worth, Dallas, and the West Fork and Clear Fork Extensions) consisting of levee and channel improvements. Two additional floodway projects, the Dallas Floodway Extension and West Fork Floodway, are authorized but have not been constructed. When the existing projects were constructed the designs were based on development criteria appropriate at that time. However, development has exceeded expectations and the magnitude of storm runoff has increased beyond the values used in project design. Additionally, modifications to upstream non-Federal reservoirs have caused some reduction in the freeboard of the existing Corps floodway projects. More importantly, current and proposed development trends in the Dallas-Fort Worth Metroplex, primarily along the mainstem Trinity River between Dallas and Fort Worth, stand to further worsen existing flooding conditions. It is estimated that in the event of the Standard Project Flood, approximately 87,700 acres of flood plain properties within the Dallas-Fort Worth Metroplex would be inundated, resulting in an estimated $13.7 billion in damages. Major floods occurred May-June 1989 and in April-May 1990. In the April-May 1990, floods over $300 million in flood damages occurred and three lives were lost. Within the study area, flooding during December 1991/January 1992 resulted in 9 deaths, over 200 homes and 12 businesses inundated, and millions of dollars in damages. Existing flood control projects in the Upper Trinity River Basin prevented a total estimated $318 million in damages in 1989 and $4 billion in 1990. All of the Corps lakes in the Upper Trinity River Basin were either close to the top of or overflowing the spillway. This study is addressing improvements in the interest of flood protection, environmental restoration, water quality, recreation, and other allied purposes in the Upper Trinity River Basin with specific attention on the Dallas-Fort Worth Metroplex. The reconnaissance report identified eleven alternatives which included two detention structures, one channel modification, six levee modifications, and two channel/levee combinations. The North Central Texas Council of Governments is the local sponsor representing nine communities, three counties, and the Tarrant County Water Control and Improvement District No 1. The Trinity River Authority, the Trinity Improvement Association and the State of Texas also support the study. The Feasibility Cost-Sharing Agreement was signed 29 August 1990 and revised with Supplement Number one dated 1 August 1991.

Fiscal Year 1995 funds are being used to continue the feasibility phase of the study. The funds requested for Fiscal Year 1996 will be used to complete the feasibility phase of the study. The estimated cost of the feasibility phase is $8,000,000, which is being shared on a 50-50 percent basis by Federal and non-Federal interests. A summary of study cost

Study	Total Estimated Federal Cost	Allocation Prior To FY 1995	Allocation FY 1995	Tentative Allocation FY 1996	Additional To Complete After FY 1996
	$	$	$	$	$

Texas (Continued)

Upper Trinity River Basin (Continued)

sharing is as follows:

Total Estimated Study Cost	$ 8,810,000
Reconnaissance Phase (Federal)	810,000
Feasibility Phase (Federal)	4,000,000
Feasibility Phase (non-Federal)	4,000,000

The reconnaissance phase was completed in August 1990. The feasibility study is scheduled for completion in September 1996.

Study	Total Estimated Federal Cost	Allocation Prior To FY 1995	Allocation FY 1995	Tentative Allocation FY 1996	Additional To Complete After FY 1996
	$	$	$	$	$
c. Shoreline Protection Studies: None					
d. Special Studies:					
Texas					
Cypress Valley Watershed	1,900,000	623,000	227,000 1/	50,000	1,000,000

1/ $50,000 of the amount available for FY 1995 is scheduled as programmed carryover into FY 1996.

The study area is inclusive of the Cypress Bayou Basin in Harrison, Gregg, Marion, Cass, Morris, Titus, Franklin, Wood and Upshur Counties in Texas and Caddo Parish in Louisiana. It includes the watersheds of Big, Little, and Black Cypress Bayous and their tributaries. The study provides an opportunity to apply a broad based watershed management approach, with close coordination with Texas Parks and Wildlife Department, to investigate the Cypress Bayou Basin's existing and future water resources problems and needs. This approach will entail addressing flood control, water quality, environmental (protection/restoration/management), and recreation in a comprehensive manner. Ferrells Bridge Dam - Lake O' The Pines, the only flood control structure in the study area, located on Big Cypress Bayou, began to impound water in 1957. However, since that time, the uncontrolled tributary watersheds of the downstream Little and Black Cypress Bayous have caused flood flows to occur along Big Cypress Bayou 14 times. The most recent floods occurred in 1980, 1989, and 1990. During the May-June 1989 floods, homes, roads, and low lying areas downstream of Lake O' The Pines were flooded. As a result of the rainfall and resulting flooding two counties (Marion and Upshur) were declared Federal Disaster areas. The April-May 1990 storms again caused flooding within the basin. Releases from Lake O' The Pines were curtailed due to downstream flooding for a period of three weeks. Water quality for the streams within the basin are generally considered to be good. However, dissolved oxygen deficits have occurred in some reaches of the stream. In the past, oil field brine disposal was a problem for some reaches of the stream. Currently, the low dissolved oxygen concentrations are caused by point source wastewater discharges, sluggish stream velocities, and low reaeration rates. The study will address watershed management issues including the impacts of future development on the hydrology of the watershed, water quality, and cultural and fish and wildlife resources, the ability of the water resources to meet the needs of future development, and restoration of the historic Port of Jefferson. The study also will address the regional need for public access to Cypress Bayou and Caddo Lake and evaluate potential measures to address recreation needs as well as restoration of stream flow regimes by clearing and snagging. A tentative local sponsor has not been determined at this time and will be identified during the reconnaissance phase.

Fiscal Year 1995 funds are being used to fund the reconnaissance phase at full Federal expense. If the reconnaissance

Study	Total Estimated Federal Cost	Allocation Prior To FY 1995	Allocation FY 1995	Tentative Allocation FY 1996	Additional To Complete After FY 1996
	$	$	$	$	$

Texas (Continued)

Cypress Valley Watershed (Continued)

report is certified to be in accord with policy, the funds requested for Fiscal Year 1996 will be used to initiate the feasibility phase of the study. The preliminary estimated cost of the feasibility phase is $2,100,000, which is to be shared on a 50-50 percent basis by Federal and non-Federal interests. Up to one half of the non-Federal share may be in-kind services. A summary of study cost sharing is as follows:

Total Estimated Study Cost	$2,950,000
Reconnaissance Phase (Federal)	850,000
Feasibility Phase (Federal)	1,050,000
Feasibility Phase (Non-Federal)	1,050,000

The reconnaissance phase is scheduled for completion in March 1996. A completion date is being determined for this feasibility study.

Study	Total Estimated Federal Cost	Allocation Prior To FY 1995	Allocation FY 1995	Tentative Allocation FY 1996	Additional To Complete After FY 1996
	$	$	$	$	$
e. Comprehensive Studies: None					
f. Project Review Studies:					
Texas					
Buffalo Bayou and Tributaries, Addicks and Barker Reservoirs	550,000	185,000	315,000	50,000	0

Buffalo Bayou is a tributary of the San Jacinto River in southeast Texas. The Buffalo Bayou watershed of 1,034 square miles provides drainage to about 55 percent of Harris County, including most of the metropolitan areas of Houston, Texas. Addicks and Barker Reservoirs are existing flood detention facilities constructed by the Corps of Engineers in the late 1940's to provide urban flood control to the City of Houston. The two facilities, located adjacent to each other on the western edge of Houston, are treated as a single project. They were designed to reduce flood flows downstream in Buffalo Bayou. The reservoirs were authorized for construction as a part of Buffalo Bayou and Tributaries, Texas Project by the Rivers and Harbors Act of 20 June 1938. The project was subsequently modified by the 1939 and 1954 Flood Control Acts. The 1954 Act authorized, among other things, downstream channel improvements in Buffalo Bayou, extending from the reservoirs through the business district of Houston to the Houston Ship Channel Turning Basin.

The project was authorized for the purpose of protecting urban development in the downstream floodplain of Buffalo Bayou through the City of Houston and to provide an outlet channel for reservoir flood releases. Its authorization was prompted by devastating floods of 1929 and 1935. The construction of Barker Reservoir was completed in 1945. Completion of Addicks Reservoir and 7.4 miles of outlet channel immediately downstream from the reservoirs, was accomplished by 1948. Further downstream improvements in Buffalo Bayou were deferred at that time because of limited financial resources and the level of protection provided by the reservoirs, in order to concentrate on other authorized tributary channel improvements in the Buffalo Bayou basin.

Barker Reservoir is located on the headwaters of Buffalo Bayou and Addicks Reservoir is situated on South Mayde Creek, a tributary of Buffalo Bayou. Because they remain dry much of the time, most of the Federal lands acquired for flood detention have been leased for local recreational development and use. When the reservoirs were completed, they were located about 15 miles west of the city limits of Houston. Today the reservoir lands are part of the City of Houston and substantial urban development is located upstream and adjacent to the federally acquired lands. The lands acquired for the reservoirs were based on assumptions made in a 1 June 1940 report which called for an approximate 15,700 cubic feet/second

Study	Total Estimated Federal Cost	Allocation Prior To FY 1995	Allocation FY 1995	Tentative Allocation FY 1996	Additional To Complete After FY 1996
	$	$	$	$	$

Texas (Continued)

Buffalo Bayou and Tributaries,
Addicks and Barker Reservoirs (Continued)

(cfs) reservoir release rate from both detention basins combined with an improved downstream channel. The discharge rate is currently limited to 2,000 cfs because of urban growth which has occurred since that time. This has caused the ponding time to become considerably longer than originally intended. The dams have undergone significant modifications and strengthening because of the extended ponding periods and to meet the criteria of the Dam Safety Assurance Program. The existing plan for reservoir regulation is to operate the reservoirs in a manner that will prevent damaging stages on downstream Buffalo Bayou by using available storage capacity within the reservoirs.

When constructed, the reservoirs were located in a rural area. Land use in and around the reservoirs was predominately farming and ranching. However, in the past 40 years, the extensive urban growth of the western portion of the Houston metropolitan area has resulted in both reservoirs being surrounded by intense commercial and residential development. Strong pressures prevail for continued urban development throughout the watershed as the city's growth shifts westward. This situation will add to the potential flood threat both above and below the reservoirs. A request was made to extend the reconnaissance phase to 18 months because of the complexity of technical issues, the hydrologic investigations needed, and the need for an intense public involvement program. Existing condition hydrology involves inter-watershed overflows in extremely flat terrain, and the study must consider events and conditions beyond the boundaries of the immediate watershed. The potential solutions to the problem are all very expensive, involve upstream/downstream conflicts, and entail potentially significant impacts. Identifying at least one implementable, economically justified plan is expected to require examination of several dissimilar alternatives. An initial evaluation of the flood problem, potential Federal liability, and possible solutions has been made using Operation and Maintenance funds. The sponsor for future study and project cost sharing is Harris County, acting through the Harris County Flood Control District (HCFCD). The sponsor has recognized the potential costs in both dollar terms and suffering that would occur in the event of flooding of homes within the maximum pool of Addicks and Barker Reservoirs. HCFCD is already at work on the second phase of independent studies of its liabilities and options. At a meeting in April 1992, HCFCD requested that the Corps of Engineers participate with them in studies, offered to share any data from their studies, and affirmed that they would sponsor the Federal study and construction effort.

Preliminary estimates of potential flood damages upstream of Addicks and Barker Reservoirs were developed in 1992 using aerial photographs and real estate appraisals. These estimates determined that single occurrence damages for the Probable Maximum Flood would affect over 4,000 structures valued at approximately $725 million and cause damages of $425 million.

Study	Total Estimated Federal Cost	Allocation Prior To FY 1995	Allocation FY 1995	Tentative Allocation FY 1996	Additional To Complete After FY 1996
	$	$	$	$	$

Texas (Continued)

Buffalo Bayou and Tributaries,
  Addicks and Barker Reservoirs (Continued)

The Standard Project Flood would impact 2,800 structures worth $400 million and cause $100 million in damages. The 100-year event would be contained within Addicks Reservoir and not cause any damages outside government owned lands. The storage capacity of Barker Reservoir is now adequate to contain about a 70-year flood event under current operating procedures. This study is reviewing existing conditions and will identify potential alternatives to monitor operations, increase reservoir capacity, or provide increased nondamaging discharge capacity. Rains in 1992 raised reservoir levels to all time record highs. There is a need to bring the reservoirs to current capacity standards to avoid possible catastrophic damages. This is an urban flood control study that meets Administration standards for funding. The reconnaissance report was initiated in April 1994 at full Federal expense.

The funds requested for Fiscal Year 1996 will be used to complete the reconnaissance phase in April 1996.

Study	Total Estimated Federal Cost $	Allocation Prior To FY 1995 $	Allocation FY 1995 $	Tentative Allocation FY 1996 $	Additional To Complete After FY 1996 $
Texas (Continued)					
Gulf Intracoastal Waterway - Corpus Christi Bay to Port Isabel	3,790,000	460,000	10,000	400,000	2,928,000

The study area consists of the lower 117 miles of the Texas Section of the Gulf Intracoastal Waterway (GIWW) and extends from the Kennedy Causeway at Corpus Christi Bay to Port Isabel. The purpose of the study is to investigate existing and future commercial shallow draft navigation and operation needs in an effort to improve efficiency. Waterborne commerce along this reach of the waterway averages about 2 million tons annually and consists primarily of sand and gravel, crude petroleum, and refined petroleum products. The major objectives of the reconnaissance study has been to formulate potential alternative plans to reroute the GIWW at Port Isabel to reduce navigation hazards; to improve the overall navigational and operational efficiency of the waterway; and to identify environmental resource concerns for potential restoration measures, all of which will in turn reduce existing and future commercial barge transportation costs. The Reconnaissance Report was completed in July 1994 and concluded that re-routing of the GIWW at Port Isabel was not in the Federal interest, that environmental restoration measures were feasible and in the Federal interest, and that appropriate environmental documentation should accompany future study recommendations and further review is underway to evaluate additional navigation features.

Fiscal Year 1995 funds will be used to initiate the feasibility phase of the study if the reconnaisance report is certified. The reconnaissance report was completed in July 1994, but is currently being revised to be in accordance with current policy.

Fiscal Year 1996 funds will be used to continue into the feasibility phase of the study. The preliminary estimated cost of the feasibility phase is $3,330,000 to be funded by General Investigations appropriations. An additional $3,830,000 will be provided from the Operation and Maintenance, General Appropriations to continue preparation of a long-term dredge material management plan and continue an evaluation of the existing Environmental Impact Statement.

An initial appraisal of the entire 423-mile Texas section of the GIWW was completed in November 1989. The reconnaissance phase is currently scheduled to complete in July 1995. A completion date is being determined for this feasibility study.

Study	Total Estimated Federal Cost	Allocation Prior To FY 1995	Allocation FY 1995	Tentative Allocation FY 1996	Additional To Complete After FY 1996
	$	$	$	$	$
Texas (Continued)					
Gulf Intracoastal Waterway - High Island to Brazos River	2,140,000	236,000	184,000	300,000	1,420,000

The study area includes approximately 85 miles of the Gulf Intracoastal Waterway (GIWW) in Galveston and Brazoria Counties, from High Island, Texas, to the Brazos River. This study will evaluate operational problems along this reach of the GIWW. Some of the problems identified by users along this reach include difficulties in negotiating two 90-degree bends near High Island; difficulties accessing the Texas City Channel from the GIWW; difficulties negotiating a double ess curve near Freeport; deficiencies in mooring facilities and channel markers; and developing long range disposal plans. The reconnaissance study objectives are to determine if there is a Federal interest in pursuing detailed analyses and solutions to these problems and to identify the scope and cost of the feasibility study phase. The State of Texas is the non-Federal sponsor of the GIWW and continues to maintain a high interest in the waterway because of their responsibility to provide dredged material disposal areas. The State's interest is evident through monthly meetings of the State-chaired Gulf Intracoastal Waterway Advisory Committee. The GIWW is designated as part of the Nation's Inland Waterway System, and therefore, qualifies for 50-50 cost sharing from the Inland Waterways Trust Fund for construction purposes. An initial appraisal of the entire 423-mile Texas Section of the GIWW was completed in November 1989.

Fiscal Year 1995 study funds are being used to complete the reconnaissance study. Study efforts include the determination of the problems and opportunities in the study area, public involvement activities and coordination with resource agencies, and formulation of conceptual plans. An additional $140,000 from the Operation and Maintenance appropriation is being used for the reconnaissance study to initiate preparation of a long-term dredge material management plan for the existing project and also evaluate the existing Environmental Impact Statement (EIS). The reconnaissance study is scheduled for completion in February 1995, which is twelve months after initiating the study.

Fiscal Year 1996 funds will be used to continue into the feasibility study. The preliminary estimated cost of the feasibility phase is $1,720,000 to be funded by General Investigations appropriations. An additional $1,420,000 will be provided from the Operation and Maintenance, General Appropriations to continue preparation of a long-term dredged material management plan and evaluation of the existing Environmental Impact Statement. The feasibility study will be 100 percent Federally funded.

An initial appraisal of the entire 423-mile Texas Section of the GIWW was completed in November 1989. The reconnaissance phase is scheduled for completion in August 1995. A completion date is being determined for this feasibility study.

Study	Total Estimated Federal Cost	Allocation Prior To FY 1995	Allocation FY 1995	Tentative Allocation FY 1996	Additional To Complete After FY 1996
	$	$	$	$	$

3. PRECONSTRUCTION ENGINEERING AND DESIGN ACTIVITIES (PED) - NEW

a. Navigation: None.

b. Flood Control: None.

c. Shoreline Protection: None

d. Special Studies: None

4. PRECONSTRUCTION ENGINEERING AND DESIGN (PED) - CONTINUING

a. Navigation:

Texas

Study	Total Estimated Federal Cost	Allocation Prior To FY 1995	Allocation FY 1995	Tentative Allocation FY 1996	Additional To Complete After FY 1996
Gulf Intracoastal Waterway - Aransas National Wildlife Refuge	1,720,000	0	20,000	750,000	950,000

The Aransas National Wildlife Refuge is a 31-mile reach of the Gulf Intracoastal Waterway (GIWW) which crosses the critical wintering habitat of the rare and endangered whooping crane, including a 13.25-mile reach within the boundary of the Aransas National Wildlife Refuge (ANWR). This area is located approximately 35 miles northeast of Corpus Christi, Texas, in Aransas and Calhoun Counties. Whooping crane habitat losses of about 2 acres per year are caused by combinations of vessel traffic in the GIWW, wind generated waves, and to some extent dredged material disposal practices. This critical habitat loss adversely impacts the whooping crane, which is re-establishing itself along the Texas coast after nearing extinction in the 1940's. The importance of the GIWW to the economy of the lower Texas coast and its uninterrupted usage is also critical. The recommended project is to provide bank protection for the existing alignment and also to incorporate beneficial uses of dredged material to protect and create habitat. The total first cost of the recommended plan, based on 1 October 1994 price levels with inflation through the construction period, is estimated at $20,400,000. Project justification is based on the significance of whooping crane habitat, compliance with the Endangered Species Act, and combined monetary and non-monetary benefits. The State of Texas is the non-Federal sponsor of the Texas section of the GIWW.

The project has not been authorized for construction. The Gulf Intracoastal Waterway is part of the inland waterway system of the United States, and as such, project modifications are eligible for cost sharing from the Inland Waterways Trust Fund.

Study	Total Estimated Federal Cost	Allocation Prior To FY 1995	Allocation FY 1995	Tentative Allocation FY 1996	Additional To Complete After FY 1996
	$	$	$	$	$

Texas (Continued)

Gulf Intracoastal Waterway -
  Aransas National Wildlife Refuge (Continued)

The cost sharing and/or funding source for protection of critical habitat has not yet been determined.

Feasibility Study is scheduled for completion in June 1995. Fiscal Year 1996 funds will be used to continue preconstruction engineering and design (PED). PED is scheduled for completion in September 1997.

Study	Total Estimated Federal Cost $	Allocation Prior To FY 1995 $	Allocation FY 1995 $	Tentative Allocation FY 1996 $	Additional To Complete After FY 1996 $
Texas (Continued)					
Houston - Galveston Navigation Channels	18,780,000	14,050,000	1,677,000	1,100,000	1,953,000

Houston and Galveston Channels are located in the Galveston Bay system which is the largest estuarine system on the Texas Coast. The channels provide access to the principal ports of Houston and Galveston. The existing project provides 40-foot depth channels to Galveston, and to Houston as far as the Clinton Island Turning Basin and a 36-foot depth to the main Houston turning basin. The principal commodities moved on the Galveston Channel are cotton, grain, and sulfur. The principal commodities moved on the Houston Ship Channel are petroleum, chemicals, ores, grain, cotton, machinery, and general cargo. Total commerce moved on both channels averages more than 100 million tons a year. The plan of improvement for Houston Ship Channel provides for a 50-foot deep by 600-foot wide channel to the vicinity of the Shell Oil Company Docks near Boggy Bayou in Houston. The plan of improvement for Galveston Channel provides for a 50-foot deep by 450-foot wide channel within the existing 1,100- to 1,125-foot channel.

The plan of improvement called for the enlargement of the Houston Ship Channel and Galveston Channel in two phases:

(1) Phase I - Enlarge the Houston Ship Channel to a depth of 45 feet and a width of 530 feet, and the Galveston Channel to a depth of 45 feet and a width of 450 feet, and deepening the entrance channel to 45 feet.

(2) Phase II - Deepen the Houston Ship Channel to 50 feet and a width of 600 feet, and the Galveston Channel to a depth of 50 feet and a width of 450 feet, and deepening the entrance channel to 50 feet. Phase II (50-foot) is not economically justified and the local sponsors have agreed to stop the work effort on this increment. The channel was optimized as directed by higher headquarters at the In-Progress Review held on 2-3 June 1993. The optimized channel depth is 45 feet. Ship simulation study results have increased the Galveston Channel to widths which vary from 650 feet to 1,112 feet.

A locally preferred dredged material disposal plan for Galveston Bay has been incorporated into the plan. Such a plan would utilize confined disposal areas or beneficial uses of dredged material in the bay and/or offshore disposal for construction activities and the operation and maintenance resulting from them.

This plan will also address the deepening of the existing 40-foot deep by 800-foot wide Galveston Harbor Channel to 50-52 feet deep over its 10.5 mile length, and extending the Galveston Entrance Channel about 12.5 miles to the 52-foot bottom contour in the Gulf of Mexico along the existing alignment.

Study	Total Estimated Federal Cost	Allocation Prior To FY 1995	Allocation FY 1995	Tentative Allocation FY 1996	Additional To Complete After FY 1996
	$	$	$	$	$

Texas (Continued)

Houston - Galveston Navigation Channels (Continued)

Phase II of the project, deepening from 45-foot to 50-foot, has been eliminated because of lack of economic justification. Based on the Feasibility Report the total project cost for the Houston-Galveston Channels, including the Galveston Entrance Channel, is estimated at $775,300,000 (1 October 1994 prices with inflation through the construction period). The average annual benefits resulting from transportation savings from using larger or more efficient vessels, reduction in vessel casualties, and reduction of vessel delays are estimated at $66,930,000. The benefit-to-cost ratio is 1.5 to 1 based upon the Chief of Engineers' Report dated July 1988, with costs updated to October 1994 price levels. A Limited Reevaluation Report is currently being prepared and is scheduled for completion in September 1995. Benefits evaluation is ongoing, and the results will be available when the reevaluation report is complete. The local sponsors are the Port of Houston Authority and the Port of Galveston. By letter dated 1 September 1989, the Port of Houston Authority expressed their support for the project. Houston and Harris County voters approved a $130 million Port of Houston bond issue on 7 November 1989, by a 63 percent to 37 percent margin. The Port of Galveston expressed their support for the project by letter dated January 1987.

The project is not authorized. In accordance with the cost sharing and financing concepts reflected in the Water Resources Development Act of 1986, local interests are required to pay cash for a portion of the cost of deepening and widening the channels, presently estimated at $303,970,000; pay the cost of preparing disposal areas, presently estimated at $28,280,000; pay the cost of deepening berthing areas, presently estimated at $9,030,000; modify or relocate pipelines, docks and facilities, and provide associated lands, easements and rights-of-way, where necessary in the construction of the project, presently estimated at $125,320,000; provide a portion of the cost of measures necessary to mitigate the project's adverse environmental impacts, presently estimated at $12,800,000; and pay a portion of the costs of operation and maintenance and replacement of the project currently estimated at $1,210,000 annually.

The Final Environmental Impact Statement (FEIS) on the project was filed with the Environmental Protection Agency on 25 November 1988. A supplement to the FEIS will be prepared prior to the construction phase of the project.

Fiscal Year 1995 funds are being used to complete the reevaluation report and Supplement to the EIS. Fiscal Year 1996 funds will be used to continue collecting preconstruction engineering and design study data. A completion date is being determined for this PED effort.

Study	Total Estimated Federal Cost	Allocation Prior To FY 1995	Allocation FY 1995	Tentative Allocation FY 1996	Additional To Complete After FY 1996
	$	$	$	$	$
Texas (Continued)					
Neches River and Tributaries					
Salt Water Barrier	2,100,000	1,662,000	0	100,000	338,000

The project is located in Jefferson and Orange Counties just north of the I-10 bridge at Beaumont, Texas on the Neches River at Bairds Bayou. Annually, the fresh water supply sources to the city of Beaumont and the Lower Neches Valley Authority are threatened by salt water intruding up the Neches River during periods of low river flow and high withdrawal rates. To avoid damages, the Lower Neches Valley Authority constructs temporary salt water barriers in the Neches River and in Pine Island Bayou. Although effective and economical, these barriers interfere with navigational use and are not acceptable long term solutions to the problem of salinity intrusion. The project as described in the Phase I General Design Memorandum, approved January 1982, provides for a tainter-gated saltwater barrier structure, a gated navigation bypass channel, an access road and levee, and an auxiliary dam across a canal which drains Bairds Bayou.

The project was authorized by the Water Resources Development Act of 1976, but project cost sharing will be in accordance with Section 103 C (3) of the Water Resources Development Act of 1986, which specifies that agricultural water supply projects are shared at 65 percent Federal and 35 percent non-federal (inclusive of lands, easements, rights-of-way, and disposal areas). The project cost, which includes inflation through the period of construction (based on Fiscal Year 1993 prices), is currently estimated at $60,780,000. The local share of the cost is $18,000,000 and private cost to relocate the Temple Island Industries effluent is estimated at $9,470,000. Agricultural water supply benefits are estimated at $7,778,900 for the prevention of salt water contamination of the water supply which is critical to the production of rice. Environmental enhancement and Fish and Wildlife benefits are estimated at $685,200 and an additional $84,000 in benefits to Navigation will be derived from protection to small craft that use the waterway. Total average annual benefits are $8,547,000 and the benefit-cost ratio is 2.0 to 1 based upon Fiscal Year 1986 prices. The project, as described, is economically justified, environmentally sound and in the public interest.

Preconstruction planning and detailed planning for the levees and access road were completed and plans and specifications were approved in May 1984. The local sponsor, the Lower Neches Valley Authority, found the provisions required by WRDA of 1986 unacceptable and the project was recommended for placement in inactive status in October 1987. The sponsor has shown renewed interest in the project by letter dated 5 January 1994 and the local sponsor is seeking ways to finance their share of the project costs.

In FY 1995, a Limited Reevaluation Report will be initiated to provide a current economic analysis update, an assessment of cost sharing requirements, and to assure the recommended plan is in compliance with current Administration priorities. A completion date is being determined for this preconstruction engineering design effort.

Study	Total Estimated Federal Cost	Allocation Prior To FY 1995	Allocation FY 1995	Tentative Allocation FY 1996	Additional To Complete After FY 1996
	$	$	$	$	$
b. Flood Control:					
Kansas					
Winfield	1,900,000	1,010,000	220,000	670,000	0

The Winfield, Kansas Local Protection Project is located on Walnut River and Timber Creek at Winfield in south central Kansas. The River and Creek have drainage areas of 1,840 and 158 square miles, respectively. The maximum flood of record at Winfield occurred in April 1944 and resulted in the loss of 5 lives. That flood would have caused an estimated $18 million in damages to the city of Winfield using October 1994 prices. The existing local levee system, improved by the city in 1986, provides 70-year flood protection. About 70 percent of the residents live in the flood plain. The continued risk of flooding prompted the city to request further studies. A draft General Revaluation Report (GRR), completed in February 1988, recommended extending and raising the existing levee to provide 200-year flood protection. A second draft GRR was resubmitted in May 1991 confirming the recommendation. An Issue Resolution Conference (IRC) was held in January 1992 and an expanded General Revaluation Report (GRR) will be submitted in September 1995. The estimated cost of the project is $12,500,000 based on October 1994 price levels with inflation through the construction period. The average annual benefits are $965,000, all for flood control and the benefit to cost ratio is 1.6 to 1 at 8-7/8 percent, based on 1987 price levels. The average annual benefits do not include benefits resulting from recent commercial improvement and planned commercial development. The city of Winfield has, by letter dated 9 March 1989, endorsed the continuation of preconstruction engineering and design, and the city is aware of its cost sharing requirements.

The project is authorized for construction by the Flood Control Act of 1965, Section 204. In accordance with the cost sharing and financing concepts reflected in the Water Resources Development Act of 1986, the non-Federal sponsor must provide lands, easements, rights of way, and dredged material disposal areas, presently estimated at $1,060,000; modify or relocate utilities, roads, bridges (except railroad bridges), and other facilities where necessary for the construction of the project, presently estimated at $940,000; pay in cash a total of 9 percent of the cost allocated to flood control (5 percent presently estimated at $625,000, and an additional 4 percent presently estimated at $500,000 to bring the total non-Federal share up[to the minimum of 25 percent) presently estimated at $1,125,000; and bear all costs of operation and maintenance, repair, rehabilitation and replacement of flood control facilities, presently estimated at $69,000 annually. On 7 October 1985, the Assistant Secretary of the Army (Civil Works) and the city of Winfield signed a Section 215 Agreement which allows a credit for work, completed by the City in 1987, which improved the existing levee to provide 100-year level of protection. This credit will be applied against the cash contribution and against other lands, easements, rights-of-way or the cost of relocations.

APPROPRIATION TITLE: General Investigations, Fiscal Year 1996 **Southwestern Division**

Study	Total Estimated Federal Cost	Allocation Prior To FY 1995	Allocation FY 1995	Tentative Allocation FY 1996	Additional To Complete After FY 1996
	$	$	$	$	$

Kansas (Continued)

Winfield (Continued)

Funds prior to Fiscal Year 1995 are being used to continue preconstruction engineering and design. Fiscal Year 1996 funds will be used to complete preconstruction engineering and design. Preconstruction engineering and design is scheduled for completion in January 1997.

Study	Total Estimated Federal Cost $	Allocation Prior To FY 1995 $	Allocation FY 1995 $	Tentative Allocation FY 1996 $	Additional To Complete After FY 1996 $
New Mexico					
Las Cruces, El Paso and Vicinity	400,000	0	200,000	200,000	0

The city of Las Cruces is located in the Mesilla Valley of the Rio Grande in Dona Ana County, south-central New Mexico. The City, currently populated by 62,000 people, is one of the fastest growing cities in the southwest. The results of the reconnaissance study demonstrated that a serious flood problem exists in the downtown area of Las Cruces. Average annual damages within the study area are estimated at $2.2 million. The reconnaissance study identified a plan that would provide 100-year protection to a portion of the study area. The plan consists of the modification and enlargement of two existing, locally constructed detention structures and the enlargement of an existing drainage channel. The project described in the report has an estimated cost of $8.0 million with an estimated Federal cost of $6.0 million, and an estimated non-Federal cost of $2.0 million. The benefit-cost ratio is 2.3 to 1 based upon the latest economic analysis dated May 1991. This plan, as well as others, are currently being analyzed in the cost-shared feasibility study, which is scheduled for completion in May 1995. The non-Federal sponsor will be the City of Las Cruces, New Mexico, which is funding one-half of the cost of the feasibility study and is actively participating in the formulation of flood control alternatives.

The project is not authorized for construction. In accordance with the cost sharing requirements and financing concepts reflected in the Water Resource Development Act of 1986, the non-Federal sponsor will be required to provide all lands, easements, rights-of-way, relocations, and disposal areas required for the project; pay five percent cash of the total project cost; and additional cash to bring the non-Federal sponsor's minimum share of the project costs to twenty-five percent. The non-Federal sponsor will also be responsible for all operation, maintenance, repair, rehabilitation, and replacements that the project will require in the future.

Fiscal Year 1995 funds will be used to initiate plans and specifications. Fiscal Year 1996 funds will be used to complete plans and specifications. Preconstruction engineering and design is scheduled for completion in July 1996.

Study	Total Estimated Federal Cost	Allocation Prior To FY 1995	Allocation FY 1995	Tentative Allocation FY 1996	Additional To Complete After FY 1996
	$	$	$	$	$
Texas					
Brays Bayou, Houston	6,300,000	2,043,000	755,000	500,000	3,002,000

Brays Bayou drains about 137 square miles in the south-central portion of the Buffalo Bayou watershed. The area is subject to rainstorms throughout the year and urban flooding is a common occurrence. About 53,400 homes and businesses are currently subject to flooding by the Standard Project Flood (SPF), and about 25,000 of these properties would be subject to flooding by a 100-year frequency flood. On an average annual basis, stream flooding could cause nearly $46,000,000 in damages per year to existing properties. Brays Bayou is one feature of a comprehensive plan for the Buffalo Bayou watershed which has five other separate elements providing flood control on Greens, Halls, Hunting, Little White Oak, and Carpenters Bayous. The recommended plan of improvement for Brays Bayou includes 3 miles of stream improvements, 3 flood detention basins, and 7 miles of stream diversion. The plan would reduce the existing 100-year frequency floodplain area along Brays Bayou by about 97 percent. Average annual flood damages would be reduced by about 95 percent. Aesthetic vegetation would be included. Recreation features including hike and bike trails, picnic facilities, sports fields, comfort stations and parking areas are included. The total first cost of the recommended plan, based on October 1994 price levels with inflation through the construction period, is estimated at $422,400,000. The average annual benefits are estimated at $84,989,500 for flood control, and $1,623,700 for recreation. The benefit-cost ratio is 2.6 to 1 based upon the latest economic analysis dated March 1993 with cost updated to October 1994. Benefits have been reviewed and deemed valid until ongoing project evaluation is complete. The Local Cost-Sharing Sponsor (LCSS) has requested that the project be divided into separable elements in accordance with their financial capability. Separable elements have been identified and analysis is ongoing and a draft Limited Reevaluation Report is scheduled to be approved at HQUSACE in February 1995. Coordination with the LCSS has also led to timing of the construction start to coincide with their potential financial capability. The PED schedules have been optimized for efficiency and detail. The LCSS for the project is the Harris County Flood Control District (HCFCD), a certified agent of the Harris County Commissioners Court in Texas. They are a willing and viable local sponsor, and at present are the cost sharing partner on two major flood control projects, Clear Creek and Sims Bayou, Texas, which are under construction. Project is being developed in concert with the local sponsor and on a timetable to meet their financial requirements.

The project is authorized for construction by the Water Resources Development Act of 1990. In accordance with the Water Resources Development Act of 1986, local interests are required to provide all project lands, easements and rights-of-way, and relocations presently estimated at $187,000,000; pay one-half of the separable costs allocated to recreation, presently estimated at $3,400,000, and bear all costs of operation, maintenance and replacement of recreation facilities presently estimated at $91,200 annually, and pay 5 percent of the costs allocated to flood control presently estimated at $20,800,000 to bring the non-federal share of cost allocated to flood control to approximately 50 percent presently estimated at

Study	Total Estimated Federal Cost	Allocation Prior To FY 1995	Allocation FY 1995	Tentative Allocation FY 1996	Additional To Complete After FY 1996
	$	$	$	$	$

Texas (Continued)

Brays Bayou, Houston (Continued)

$207,800,000, and bear all costs of operation, maintenance, repair and replacement of flood control facilities currently estimated at $884,800 annually.

Fiscal Year 1995 funds are being used to complete a Limited Reevaluation report and to continue the Project Design Memorandum (PDM) for the detention element and to initiate a GRR to identify an alternative to the diversion element. Fiscal Year 1996 funds will be used to continue the PDM for detention, continue the GRR for the alternative to the diversion and continue preconstruction engineering and design (PED). A completion date is being determined for this PED effort.

Study	Total Estimated Federal Cost	Allocation Prior To FY 1995	Allocation FY 1995	Tentative Allocation FY 1996	Additional To Complete After FY 1996
	$	$	$	$	$
Texas (Continued)					
Cypress Creek, Houston	6,800,000	1,326,000	419,000	300,000	4,755,000

The project is located north of Houston in Harris County, Texas on Cypress Creek. The lower portion of the Cypress Creek watershed has experienced a dynamic growth over past decades and the 319-square-mile drainage area now contains about 172,000 people. The frequency of Cypress Creek overflows has increased concurrently with the population growth. The magnitude of the flood damage to the growing residential and commercial development has reached intolerable levels. More than 3,400 homes and businesses are currently subject to flooding by the Standard Project Flood (SPF); more than 2,400 of those properties would be damaged by a 100-year flood. A single occurrence of the 100-year flood would cause an estimated $98,000,000 in damages to flood plain properties along Cypress Creek. During a flood event in October 1984, several hundred homes were flooded, and about 500 persons were evacuated. An even larger flood occurred in May 1989, damaging 540 homes and causing property losses in excess of $10,000,000. The recommended project, estimated to cost $184,000,000 (1 October 1994 prices with inflation during the construction period), includes: (1) enlargement of the lower 29.4 miles of the Cypress Creek Channel, incorporating grassed side slopes and channel bottom and appropriate erosion control measures; (2) application of flood plain management techniques, primarily to future development, in the residual flood plain; (3) construction of project-oriented recreation features, including 11.5 miles of hike-and-bike trails and related facilities for health, safety, and public access; and (4) habitat management measures on 422 acres of Harris County Parkway Project land, creation of wooded and brush habitat along 70 acres of the project right-of-way, acquisition of 329 acres of wildlife habitat along the creek, and creation of 64 acres of ponds and marshes. The average annual benefits amount to $16,418,000 ($12,698,000 for flood control, $1,506,000 for recreation and $2,214,000 for other benefits). The benefit-to-cost ratio is 1.3 to 1 based upon the latest economic analysis dated October 1989 with cost updated to October 1994. The local sponsor, Harris County Flood Control District (HCFCD), wants to provide flood protection for Cypress Creek, but does not support the proposed channel plan. The local sponsor would like flood control methods with less physical impacts to the stream. Preliminary investigation has identified buy-out of structures, elevation of structures, and levees for protection of specific areas of the watershed as other alternatives for continued study. The HCFCD agreed to provide 50 percent of the cost for a reevaluation study and the cost-sharing agreement was executed 28 February 1994. A draft General Reevaluation report is scheduled to be completed in August 1996 and approved by higher authority in March 1997. A benefit evaluation will be included as plans are developed.

The project is authorized for construction by the Water Resources Development Act of 1988. Local interests are required to provide lands, easements and rights-of-way, presently estimated at $20,000,000; modify or relocate buildings, pipelines, utilities, roads and other facilities, except railroad bridges and Federal utilities, where necessary in the construction of the project, presently estimated at $8,900,000; pay one-half of the separable costs allocated to recreation, presently

Study	Total Estimated Federal Cost	Allocation Prior To FY 1995	Allocation FY 1995	Tentative Allocation FY 1996	Additional To Complete After FY 1996
	$	$	$	$	$

Texas (Continued)

Cypress Creek, Houston (Continued)

estimated at $2,500,000; bear all costs of operation, maintenance and replacement of recreation facilities presently estimated at $32,200 annually; pay 9 percent of the costs allocated to flood control including mitigation and cultural resources presently estimated at $15,800,000 to bring the non-Federal share of cost allocated to flood control to approximately 25 percent presently estimated at $44,700,000; and bear all costs of operation, maintenance and replacement of flood control facilities, presently estimated at $886,400 annually.

Fiscal Year 1995 funds are being used to continue the draft General Reevaluation Report and continue preconstruction engineering and design. Fiscal Year 1996 funds will be used to complete the General Reevaluation Report scheduled to be completed in August 1996. A completion date is being determined for this preconstruction engineering and design effort.

Study	Total Estimated Federal Cost	Allocation Prior To FY 1995	Allocation FY 1995	Tentative Allocation FY 1996	Additional To Complete After FY 1996
	$	$	$	$	$
Texas (Continued)					
Dallas Floodway Extension, Trinity River Project	4,330,000	1,597,000	200,000	500,000	2,033,000

The project area is located in Dallas, Texas. In 1960, the Corps of Engineers rebuilt the existing Dallas Floodway, which is located near the confluence of Elm Fork and West Fork of the Trinity River. As originally designed the Dallas Floodway Extension would extend the channel/levee system of the Dallas Floodway downstream a distance of 9 miles. Also included in the original project were 4.1 miles of channel improvements along White Rock Creek, and 5.4 miles of channel improvements to divert Five Mile Creek. Authorized by Congress in 1965 as part of the Trinity River Project, the Dallas Floodway Extension, (based on 1 October 1991 price level with future inflation), was estimated to cost a total of $220,000,000; $110,000,000 in Federal cost and $110,000,000 in non-Federal cost. A total of 1,799 structures would have been protected from the Standard Project Flood, as would 6,450 acres of land. The 5,000 acres of land between the proposed levees would serve as a greenbelt and recreation area. In 1982, the Corps of Engineers placed the project in an inactive status because the city of Dallas failed to pass a bond election to support the project. In May 1989, approximately 300 homes and the city of Dallas Service Distribution Center were damaged by flooding in the Rochester Park area. This same area was flooded during April and May 1990 when the Dallas-Fort Worth Metroplex received 25 inches of rain and as much as 16 inches in one 24 hour period in some locations. The most recent flood was in December 1991-January 1992, when about 200 homes in the Rochester Park area were inundated when the Trinity River overflowed its banks. The city of Dallas, by letter dated 2 October 1989, requested a reevaluation of the Dallas Floodway Extension, which was initiated in Fiscal Year 1991. The city of Dallas, the local sponsor, is very interested in this project and understands the financial requirements of cost sharing. The city of Dallas completed the construction of a levee in November 1992, which will provide a 100-year flood frequency protection to Rochester Park and construction of a levee in 1993, which will provide 100-year protection to the Central Waste Water Treatment Plant.

While the reevaluation study is scheduled for completion in October 1995, it has been determined that the authorized project is no longer justified. Based on preliminary findings of the reevaluation study, the National Economic Development (NED) Plan is now a swale with an average width of 1200 feet. The first cost of this plan is approximately $54 million, based on October 1994 prices, with a benefit-cost ratio of 3.8 to 1. The locally preferred plan has yet to be identified, but Federal participation will be limited to approximately $27 million, as defined by the cost sharing provisions applicable to the NED Plan. The project was originally authorized for construction under the Rivers and Harbors Act approved 2 March 1945 (Public Law 79-14, House Document 403/77/1); Rivers and Harbors Act approved 17 May 1950 (Public Law 81-516, House Document 242/81/1) as part of the Trinity River Project. Based on preliminary findings of the reevaluation studies, reauthorization of the project will likely be necessary.

Study	Total Estimated Federal Cost	Allocation Prior To FY 1995	Allocation FY 1995	Tentative Allocation FY 1996	Additional To Complete After FY 1996
	$	$	$	$	$
Texas (Continued)					
Dallas Floodway Extension, Trinity River Project (Continued)					

Fiscal Year 1995 funds are being used to continue the General Reevaluation Report (GRR) and Environmental Impact Statement. Fiscal Year 1996 funds will be used to complete the GRR in October 1995 and to initiate the Project Design Memorandum, which is scheduled for completion in November 1997. A completion date is being determined for this preconstruction engineering and design effort.

Study	Total Estimated Federal Cost $	Allocation Prior To FY 1995 $	Allocation FY 1995 $	Tentative Allocation FY 1996 $	Additional To Complete After FY 1996 $
Texas (Continued)					
Greens Bayou, Houston	4,040,000	2,559,000	587,000	300,000	594,000

Greens Bayou, excluding its tributary of Halls Bayou, drains about 154 square miles in the north central area of the Buffalo Bayou watershed. The area is subject to rainstorms throughout the year and urban flooding is a common occurrence. About 10,967 homes and businesses are currently subject to flooding by the Standard Project Flood (SPF), and about 7,100 of these properties would be subject to flooding by a 100-year frequency flood. On an average annual basis, stream flooding could cause about $17,800,000 in damages per year to existing properties. Greens Bayou is one feature of a comprehensive flood control plan for the Buffalo Bayou watershed which has six separate elements providing flood control on Carpenters, Greens, Halls, Hunting, Little White Oak, and Brays Bayous. Plan features for Greens Bayou include 25 miles of channel improvements, 14 miles of selective clearing, acquisition of flood-prone properties, and 4 flood detention basins. The proposed project would provide about 25-year flood protection, but would reduce average annual damages by 91.2 percent. Aesthetic vegetation would be included to improve environmental quality, and mitigation would be required to compensate for the loss of 48 acres of riparian forest fish and wildlife habitat, and for 194 acres of upland forest wildlife habitat. Recreation features incorporated into the plan include trails, picnic facilities, sports fields, canoe launching ramps, comfort stations and parking areas. The total first cost of the recommended plan, based on October 1994 price levels with inflation through the construction period, is estimated at $267,900,000. The average annual benefits are estimated at $61,373,300 for flood control, and $1,901,800 for recreation. The benefit-cost ratio is 2.2 to 1 based upon the latest economic analysis dated August 1993 with cost updated to October 1994. Benefits have been reviewed and deemed valid until ongoing project evaluation is complete. The Local Cost-Sharing Sponsor (LCSS) has requested that the project be divided into separable elements in accordance with their financial capability.

Separable elements have been identified, and a draft Limited Reevaluation Report (LRR) was completed by SWG October 1993. Although separable elements exist for the project, HQUSACE directed that phased construction be pursued. Coordination with the local sponsor on 20 May 1994 indicates that reevaluation may be necessary. Further partnering with the sponsor will determine if a General Reevaluation Report (GRR) or Project Design Memorandum (PDM) will be pursued. Coordination with the LCSS has also led to timing of the construction start to coincide with their potential financial capability. The Preconstruction Engineering and Design (PED) schedules will be optimized for efficiency and detail. The LCSS for the project is the Harris County Flood Control District (HCFCD), a certified agent of the Harris County Commissioners Court in Texas. They are a willing and viable local sponsor, and are the cost sharing partner on two major flood control projects, Clear Creek and Sims Bayou, Texas, which are under construction.

Study	Total Estimated Federal Cost	Allocation Prior To FY 1995	Allocation FY 1995	Tentative Allocation FY 1996	Additional To Complete After FY 1996
	$	$	$	$	$

Texas (Continued)

Greens Bayou, Houston (Continued)

This project is authorized for construction by the Water Resources Development Act of 1990. In accordance with the Water Resources Development Act of 1986, local interests are required to provide all project lands, easements and rights-of-way, presently estimated at $46,600,000; modify or relocate buildings, pipelines, utilities, roads, and other facilities, except railroad bridges, where necessary for the construction of the project, at a cost presently estimated at $43,200,000; pay one-half of the separable costs allocated to recreation, presently estimated at $2,800,000; and bear all costs of operation, maintenance and replacement of recreation facilities presently estimated at $108,200 annually; and pay 5 percent of the costs allocated to flood control presently estimated at $13,100,000 to bring the non-Federal share of cost allocated to flood control to approximately 39 percent presently estimated at $102,900,000. In addition, the local sponsor is required to bear all costs of operation, maintenance and replacement of flood control facilities currently estimated at $507,700 annually.

Fiscal Year 1995 funds are being used to continue PED studies. Fiscal Year 1996 funds will be used in development of a GRR or PDM as appropriate and to continue PED which is currently scheduled for completion in March 1997, however, discussions are underway with the local sponsor. It may be necessary to reassess formulation of an acceptable plan. A completion date is being determined for this preconstruction engineering and design effort.

Study	Total Estimated Federal Cost $	Allocation Prior To FY 1995 $	Allocation FY 1995 $	Tentative Allocation FY 1996 $	Additional To Complete After FY 1996 $
Texas (Continued)					
South Main Channel	6,000,000	1,118,000	1,255,000	900,000	2,727,000

The South Main Channel is a major feature of the Lower Rio Grande Basin project, a comprehensive flood control-drainage project for the two-county Valley region of Texas. The South Main Channel project is located in Hidalgo and Willacy Counties, Texas. Existing drainage is extremely limited throughout the Lower Rio Grande Basin, and runoff is impeded by flat topography, roads, railroads, irrigation canals, and inadequate outlets. Flood waters damage homes, businesses, and crops; block transportation; interrupt business, tourism, school attendance, and utility services; and increase rescue and repair activities. Under existing conditions the average annual flood damages are estimated at $11,892,000 (1 October 1994 prices). The area is subject to flooding from long-term accumulations of moderate rainfall as well as from torrential rainfall associated with tropical storms. Hurricane Beulah (1967), one of the largest in the history of the area, dumped more than 30 inches of rain in the Valley and caused almost $124,556,000 (1 October 1994 price levels) in damages in Cameron, Hidalgo, and Willacy Counties. Numerous cities and communities and almost 500,000 acres of agricultural land were flooded by the storm. The comprehensive flood control and drainage project for the region was authorized by the Water Resources Development Act of 1986. The South Main Channel feature of the project, estimated to cost $222,000,000 based on October 1994 prices with inflation through the mid-point of the construction period, consists of major outlet improvements which includes enlargement of existing channels and construction of new channels totaling 113 miles. This would provide flood protection for the cities of McAllen, Edinburg, Edcouch, La Villa and Lyford, as well as the rural areas of Hidalgo and Willacy Counties north of U.S. Highway 83. The average annual benefits for this feature amount to $17,761,000, all for flood control and drainage. The benefit-to-cost ratio is 1.14 to 1 based upon the 1985 Phase I General Design Memorandum, modified by the Water Resources Development Act of 1986, with cost updated to October 1994 prices. General Reevaluation studies are being conducted to reaffirm the authorized plan under current evaluation criteria, and physical and economic conditions. The General Reevaluation report will be completed in July 1998. The local sponsors are Hidalgo County Drainage District No. 1 and Willacy County Drainage District No. 1. Date of assurances were initially received in November 1969 and reaffirmed in December 1980, July 1982, December 1989, and October 1993. To date the HCDD No. 1 has spent about $60 million in drainage measures and applied and received approval partial credit under Sect. 104 of WRDA 86.

The project is authorized for construction by the Water Resources Development Act of 1986. In accordance with the cost-sharing and financing concepts reflected in the Water Resources Development Act of 1986, local interests are required to provide lands, easements, and rights-of-way, presently estimated at $34,009,000; modify or relocate buildings, pipelines, utilities, roads and other facilities, except railroad bridges and Federal utilities, where necessary in the construction of the project, presently estimated at $34,791,000; pay 5 percent of the first costs allocated to flood control, presently estimated at $11,100,000 to bring the non-federal share of cost allocated to flood control to approximately 36 percent

Study	Total Estimated Federal Cost	Allocation Prior To FY 1995	Allocation FY 1995	Tentative Allocation FY 1996	Additional To Complete After FY 1996
	$	$	$	$	$

Texas (Continued)

South Main Channel (Continued)

presently estimated at $79,900,000; and bear all costs of operation, maintenance, and replacement of flood control facilities currently estimated at $455,000 annually.

Fiscal Year 1995 funds are being utilized to continue General Reevaluation studies. Fiscal year 1996 funds will be used to continue the General Reevaluation Studies. A completion date is being determined for this preconstruction engineering and design effort.

c. Shoreline Protection: None

d. Multiple Purpose: None

APPROPRIATION TITLE: Construction, General - Local Protection (Flood Control)

PROJECT: Abiquiu Dam Emergency Gates, New Mexico (New Start)

LOCATION: The project is located in Rio Arriba County on the Rio Chama near the City of Española, New Mexico.

DESCRIPTION: The project consists of installing two emergency gates in the existing control structure to ensure the operational integrity of the control structure for its authorized purpose.

AUTHORIZATION: The Water Resources Development Act of 1986 (Sec 1112).

REMAINING BENEFIT - REMAINING COST RATIO: 1.9 to 1 at 8 percent.

TOTAL BENEFIT - COST RATIO: 1.8 to 1 at 8 percent.

BASIS OF BENEFIT - COST RATIO: 903(a) Report approved June 1990 at October 1989 price levels.

SUMMARIZED FINANCIAL DATA			**ACCUM. PCT. OF EST. FED. COST**	**STATUS (1 Jan 1995)**	**PERCENT COMPLETE**	**COMPLETION SCHEDULE**
Estimated Federal Cost		$ 4,200,000		Entire Project	0	Apr 1997
Estimated Non-Federal Cost		0				
Cash Contribution	$ 0					
Other Costs	0					
Total Estimated Project Cost		$ 4,200,000				
Allocations to 30 September 1994		$ 270,000				
Conference Allowance for FY 1995		0				
Allocation for FY 1995		0				
Allocations through FY 1995		270,000	6			
Allocations Requested for FY 1996		1,200,000	35			
Programmed Balance to Complete after FY 1996		2,730,000				
Unprogrammed Balance to Complete after FY 1996		0				

PHYSICAL DATA

Outlet Works - Installation of 2 Emergency gates in the existing outlet conduit.
Height of dam - 325 feet
Diameter of control outlet - 12 feet
Head of Water - 150 feet at normal pool

JUSTIFICATION: Abiquiu Dam's existing gates require routine maintenance and inspection to ensure proper reservoir operation; however, routine maintenance and inspection does not occur because of the high cost ($250,000) to place and retrieve the bulkheads which are located under water at the intake structure. Routine bulkhead placement is not a cost effective alternative nor within the capability of the annual O&M program. The existing control structure was designed to accommodate the installation of emergency gates in the future. The emergency gates are the most cost effective method for ensuring the operational integrity of Abiquiu Dam for flood control and sediment retention. Average annual benefits are $501,000, based on October 1989 price levels, as follows:

Annual Benefits	**Amount**
Reduction in Maintenance Costs	$ 229,000
Water Loss Prevention	151,000
Sedimentation	58,000
Recreation	62,000
Flood Control	1,000
Total	$ 501,000

FISCAL YEAR 1996: The requested amount will be applied as follows:

Initiate Construction	$ 950,000
Planning, Engineering and Design	120,000
Construction Management	130,000
Total	$ 1,200,000

NON-FEDERAL COST: Construction shall be accomplished at full Federal expense.

STATUS OF LOCAL COOPERATION: Not Applicable

COMPARISON OF FEDERAL COST ESTIMATES: The Federal cost estimate of $4,200,000 has not been presented to Congress.

STATUS OF ENVIRONMENTAL IMPACT STATEMENT: The draft Environmental Assessment accompanied the 903a report. The Finding of No Significant Impact (FONSI) was signed in January 1992.

OTHER INFORMATION: Funds to initiate preconstruction engineering and design were appropriated in FY 1989.

APPROPRIATION TITLE: Construction, General - Channels and Harbors (Navigation)

PROJECT: Channel to Victoria, TX (Continuing)

LOCATION: The project is located in south central Texas within Calhoun and Victoria Counties. The channel extends approximately 35 miles from the Gulf Intracoastal Waterway in San Antonio Bay to a turning basin located approximately seven miles south of the City of Victoria.

DESCRIPTION: The existing 9-foot by 100-foot Channel to Victoria is a tributary channel to the Gulf Intracoastal Waterway (GIWW). The project, authorized by the Water Resources Development Act of 1988, consists of enlarging the 35-mile shallow-draft navigation channel to 12 feet by 125 feet from the GIWW in San Antonio Bay to a 500-foot by 800-foot turning basin near the City of Victoria. The 2.3 million cubic yards of material dredged from the 10-mile bay reach will be deposited in two upland disposal areas, one 340 acres in size and the other 265 acres; the 4.3 million cubic yards of material dredged from the landlocked reach will be placed in disposal areas adjacent to the channel. The project also includes upgrading the fender systems at the Highway 35 bridge and the Missouri Pacific Railroad bridge and construction of two weir structures in the vicinity of Green Lake. The local sponsors for the project are the Victoria County Navigation District and the West Side Calhoun County Navigation District.

AUTHORIZATION: Water Resources Development Act of 1988.

REMAINING BENEFIT-REMAINING COST RATIO: 2.1 to 1 at 8 3/4 percent.

TOTAL BENEFIT-COST RATIO: 1.6 to 1 at 8 3/4 percent.

INITIAL BENEFIT-COST RATIO: 1.6 to 1 at 8 3/4 percent (FY 1993)

BASIS OF BENEFIT-COST RATIO: Benefits are based on Reevaluation Report approved at Southwestern Division January 1990, costs are included in the Project Design Memorandum approved by Southwestern Division October 1991, as amended and updated to October 1994 price levels. Benefits were reaffirmed in a limited reevaluation report approved at the ASA (CW) on 18 October 1994.

SUMMARIZED FINANCIAL DATA				ACCUM. PCT.OF EST FED. COST
Estimated Federal Cost (CoE) Scheduled Construction		$24,616,000		
Estimated Federal Cost (DoT) Scheduled Construction		226,000		
Estimated Federal Cost (USCG) Scheduled Construction		58,000		
Estimated Total Federal Cost		$24,900,000		
Estimated Non-Federal Cost		7,660,000		
Scheduled Construction	$7,660,000			
Cash Contribution $2,735,000				
Other Costs 4,925,000				
Total Estimated Scheduled Construction Cost		$32,560,000		
Total Estimated Project Cost		32,560,000		
Allocations to 30 September 1994		3,162,000		
Conference Allowance for FY 1995		1,200,000		
Allocation for FY 1995		1,010,000	1/	
Allocations through FY 1995		4,172,000	2/	17
Allocation Requested for FY 1996		3,100,000		29
Programmed Balance to Complete after FY 1996		17,344,000		
Unprogrammed Balance to Complete after FY 1996		0		

1/ Reflects $190,000 reduction assigned as savings and slippage.
2/ Reflects $1,762,000 programmed carryover into FY 1996.

STATUS (1 Jan 1995)	PERCENT COMPLETE	PHYSICAL COMPLETION SCHEDULE
Entire Project	0	Being Determined

PHYSICAL DATA

Channels:
Shallow Draft Channel 12' x 125' x 35 miles long
Upland Disposal Areas:
13 disposal areas with total acreage of 1,930

Division: Southwestern **District: Galveston** **Project: Channel to Victoria, Texas**

JUSTIFICATION: The existing channel is 9 feet deep by 100 feet wide. The channel primarily serves several sand and gravel shippers, and petrochemical plants along the waterway. The waterway currently carries approximately 3.4 million tons per year, and projections indicate that commerce will increase in the future. The proposed plan would create a safer channel for the increased future traffic and increase future development potential along the channel. The additional channel depth will accommodate barge traffic using the Gulf Intracoastal Waterway without light loading or trans-shipment. The average annual benefits are $4,907,500, all commercial navigation, based on October 1991 price levels.

FISCAL YEAR 1996: The total program amount, including the requested and programmed carryover amounts of $3,100,000 and $1,762,000, respectively, will be applied as follows:

Initiate Fish and Wildlife	$ 218,000
Initiate Dredging Station 0+00 to 600+00	2,708,000
Initiate Dredging Station 600+00 to 1300+00	1,000,000
Initiate Dredging Station 1300+00 to 1841+00	100,000
Lands and Damages (Federal Review)	43,000
Cultural Resources	315,000
Planning, Engineering, and Design	153,000
Construction Management	325,000
Total	$ 4,862,000

NON-FEDERAL COST: In accordance with the cost sharing and financing concepts reflected in the Water Resources Development Act of 1988, the non-Federal sponsor must comply with the requirements listed below.

Requirements of Local Cooperation	**Payments during Construction and Reimbursements**	**Annual Operation, Maintenance, Repair, Rehabilitation, and Replacement Costs**
Provide lands, easements, rights-of-way, and dredged material disposal areas.	$4,925,000	$127,000
Pay 10 percent of the costs allocated to shallow draft navigation and mitigation during construction.	2,735,000	
Total Non-Federal Costs	$7,660,000	$127,000

The non-Federal sponsor has also agreed to make all required payments concurrently with project construction.

Local Method of Financing: The local sponsor's share of the cost will be financed primarily through the sale of general obligation bonds. A bond issue was passed by voters, 65 percent for and 35 percent against, on 2 October 1993 to finance Victoria County's share of construction costs. The general obligation bonds were sold on 8 March 1994.

STATUS OF LOCAL COOPERATION: In a Letter of Assurance dated 16 April 1987, the Victoria County Navigation District agreed to cost-share in the project in accordance with the Water Resources Development Act of 1988. A Project Cooperation Agreement (PCA) was executed in November 1994.

COMPARISON OF FEDERAL COST ESTIMATE: The current Federal (Corps of Engineers) cost estimate ($24,616,000) is a decrease of $79,000 from the latest estimate of $24,695,000 submitted to Congress (FY 1995). This change includes the following items.

Item	**Amount**
Price Escalation on Construction Features	$(-) 79,000
Total	$(-) 79,000

STATUS OF ENVIRONMENTAL IMPACT STATEMENT: The final Environmental Impact Statement was filed with Environmental Protection Agency on 15 August 1986. The Environmental Assessment was completed for the new project disposal areas, 20 September 1991.

OTHER INFORMATION: Funds were appropriated to initiate preconstruction engineering and design in Fiscal Year 1989 and funds to initiate construction were appropriated in Fiscal Year 1993.

APPROPRIATION TITLE: Construction, General - Channels and Harbors (Navigation)

PROJECT: GIWW - Sargent Beach, TX (Continuing)

LOCATION: The project is located in south central Texas in Matagorda County between East Matagorda Bay and Cedar Lakes approximately 170 miles north of Corpus Christi and 20 miles southwest of Freeport in the vicinity of Sargent, Texas.

DESCRIPTION: The project provides for an 8-mile structure consisting of concrete-block revetment, and two concrete sheetpile wall segments and mooring facilities at both ends.

AUTHORIZATION: Water Resources Development Act of 1992.

REMAINING BENEFIT-REMAINING COST RATIO: 3.0 to 1 at 8 1/2 percent.

TOTAL BENEFIT-COST RATIO: 2.5 to 1 at 8 1/2 percent.

INITIAL BENEFIT-COST RATIO: 2.5 to 1 at 8 1/2 percent (FY 1994).

BASIS OF BENEFIT-COST RATIO: Benefits and costs are based on the Feasibility Report with Engineering Appendix approved by HQUSACE in June 1992 (Chief's Report); costs are updated to October 1994 price levels.

SUMMARIZED FINANCIAL DATA		ACCUM. PCT. OF EST. FED. COST	STATUS: (1 Jan 1995)	PERCENT COMPLETE	PHYSICAL COMPLETION SCHEDULE
Estimated Federal Cost	$ 39,400,000		Entire Project	10	Being Determined
Estimated Inland Waterways Trust Fund	39,400,000				
Total Estimated Project Cost	$ 78,800,000				

	CONSTRUCTION GENERAL APPNS.	INLAND WATERWAYS TRUST FUNDS	ACCUM. PCT. OF EST. FED. COST
Allocations to 30 September 1994	2,515,000	2,544,000	
Conference Allowance for FY 1995	5,050,000	5,050,000	
Allocation for FY 1995	4,280,000 1/	4,251,000 1/	
Allocations through FY 1995	6,795,000	6,795,000	17
Allocation Requested for FY 1996	10,000,000	10,000,000	52
Programmed Balance to Complete after FY 1996	22,605,000	22,605,000	
Unprogrammed Balance to Complete after FY 1996	0	0	

1/ Reflects $1,599,000 ($800,000 Corps and $799,000 IWTF) reduction assigned as savings and slippage and $30,000 reprogrammed to the project.

JUSTIFICATION: In the Sargent Beach area, there is a serious beach erosion problem which will, if not addressed in the near future, adversely affect the economically important GIWW. This portion of the GIWW parallels the Gulf of Mexico shoreline for about 10 miles and is separated from the Gulf by a land barrier varying in width from about 500 to 900 feet. Erosion along this reach of shoreline is threatening to breach and close the waterway. From 1965 to 1987, the Gulf shoreline has eroded at an average rate of 33 feet per year. Erosion of the shoreline continues and poses a high risk and if it continues unchecked, the Gulf will begin to create operational inefficiencies in this portion of the waterway by the year 2003. An extended breach would essentially close the waterway to barge traffic, requiring higher cost alternatives and transportation modes to be adopted to carry existing commodities. This reach of waterway carried approximately 17 million tons of commerce in Fiscal Year 1992. The average annual benefits are $17,297,000, all commercial navigation, based on October 1991 price levels.

FISCAL YEAR 1996: The requested amount will be applied as follows.

	General Appropriation	Inland Waterways Trust Fund
Continue 8-mile Revetment Construction	$ 9,500,000	$ 9,500,000
Planning, Engineering, and Design	100,000	100,000
Construction Management	400,000	400,000
Total	$10,000,000	$10,000,000

COMPARISON OF FEDERAL COST ESTIMATE: The current Federal cost estimate of $78,800,000 is a decrease of $500,000 from the latest estimate of $79,300,000 submitted to Congress (FY 1995). The total cost is funded 50 percent by the Inland Waterways Trust Fund.

Item	Amount
Price Escalation on Construction Features	$ (-) 500,000
Total	$ (-) 500,000

STATUS OF ENVIRONMENTAL IMPACT STATEMENT: The final Environmental Impact Statement was filed with Environmental Protection Agency on 20 March 1992.

OTHER INFORMATION: Funds were appropriated to initiate preconstruction engineering and design in Fiscal Year 1992 and funds to initiate construction were appropriated in Fiscal Year 1994.

APPROPRIATION TITLE: Construction, General - Locks and Dams (Navigation)

PROJECT: McClellan-Kerr Arkansas River Navigation System, Locks and Dams, AR and OK (Continuing)

LOCATION: The project is located in 15 counties in Arkansas and six counties in Oklahoma. The project begins at the confluence of the Mississippi and White Rivers and follows the White River and the Arkansas Post Canal a distance of 19 miles to the Arkansas River; thence up the Arkansas River 374 miles to the mouth of the Verdigris River; and thence up the Verdigris River to Catoosa, Oklahoma, a distance of 50 miles.

DESCRIPTION: The authorized project provides for the improvement of the Arkansas River and its tributaries by the construction of dams and channels to serve navigation, afford additional flood control, produce hydroelectric power, and provide related benefits, such as recreation and wildlife propagation. The navigation feature of the project consists of a 9-foot navigation channel from the Mississippi River to Catoosa, Oklahoma, 15 miles east of Tulsa.

AUTHORIZATION: River and Harbor Act of 1946, Water Resources Development Acts of 1974, 1986, and 1992.

REMAINING BENEFIT-REMAINING COST RATIO: The remaining benefit-remaining cost ratio is not applicable because the project is nearing completion.

TOTAL BENEFIT-COST RATIO: See above.

INITIAL BENEFIT-COST RATIO: 1.3 to 1 at 2 1/2 percent (FY 1963).

BASIS OF BENEFIT-COST RATIO: Benefits are from evaluation approved in July 1968 at 1968 price levels.

SUMMARIZED FINANCIAL DATA		**ACCUM. PCT. OF EST. FED COST (CofE Only)**	**STATUS (1 Jan 1995)**	**PERCENT COMPLETE**	**PHYSICAL COMPLETION SCHEDULE**
Estimated Federal Cost (CoE)	$649,000,000		Entire Project	93	Being Determined
Estimated Federal Cost (USCG)	2,268,000				
Estimated Non-Federal Cost	0				

SUMMARIZED FINANCIAL DATA (CONTINUED)

		ACCUM. PCT. OF EST. FED COST
Total Estimated Project Cost	$651,268,000	
Allocations to 30 September 1994	$606,193,000	
Conference Allowance for FY 1995	8,300,000	
Allocation for FY 1995	6,986,000 1/	
Allocations through FY 1995	613,179,000 2/	94
Allocation Requested for FY 1996	6,000,000	95
Programmed Balance to Complete after FY 1996	29,821,000	
Unprogrammed Balance to Complete after FY 1996	0	

1/ Reflects $1,314,000 reduction for savings and slippage.

2/ Reflects $2,000,000 in programmed carryover into FY 1996.

PHYSICAL DATA

Channels: White River - 9.8 mi, 300' wide, mi 9.8 to 0.0

Arkansas Post Canal - 9.2 mi, 300' wide, mi 19.0 to 9.8

Arkansas River - 374 mi, 250' wide, mi 460.2 (1940 survey) to 41.6 (1943 survey)

Verdigris River - 50.3 mi, 150' wide (1965 survey)

All navigation channels were excavated to an initial depth of 12' or more below normal pool level.

Locks: Type - Single Chamber, single lift with miter gates

Size - 110' X 600'

Normal (maximum) Lift - Varies from 14' for Lock No. 4 to 30' for Lock No. 1.

Number of Locks and Dams - 11 on Arkansas River and canal, 2 on Verdigris River.

Dams: Movable nonnavigable type with low sills, piers, tainter gates, abutments, and overflow embankments where required.

Lands and Damages:
Acres: 127,359 Type: Predominately agricultural Improvements: Typical farm units

PHYSICAL DATA (CONT'D)

Relocations:

Roads:	18 miles	$45,280,000	(Includes replacing 9 bridges, alter 3 bridges, and abandon 1 bridge.)
Railroads:	7 miles	$40,436,000	(Includes replacing 2 bridges, alter 6 bridges, and abandon 1 bridge.)
Cemeteries, Utilities, and Structures:		$30,016,000	Entrance Channel
(Conway Water Supply)		($21,324,000)	Levee: 3 miles $15,824,000

JUSTIFICATION: The McClellan-Kerr Arkansas River Navigation System was conceived and authorized as an overall plan made up of a group of interrelated elements consisting of lakes, multiple-purpose structures, navigation structures, and bank stabilization works, all designed on a coordinated basis to provide for development of optimum benefits. In Oklahoma, construction of Keystone and Eufaula Lakes, Robert S. Kerr Lock and Dam, Webber Falls Lock and Dam and the initial and second phase of Oologah Lake are complete, as is construction of Dardanelle Lock and Dam and the Ozark-Jeta Taylor Lock and Dam in Arkansas and construction of bank stabilization and channel rectification between the Robert S. Kerr Dam in Oklahoma and the mouth. The project opened for navigation from the Mississippi River to the Port of Tulsa at Catoosa, Oklahoma in 1970. Completion of the navigation route was a significant benefit to the economy of the surrounding area. In 1994 an estimated 11,000,000 tons of cargo were moved on the navigation system. Of this traffic, 3,000,000 tons were inbound; 4,500,000 tons were outbound, 3,000,000 tons were moved internally; and 500,000 tons were through traffic. These movements included such commodities as rock, grain, iron and steel, chemicals, chemical fertilizers, coal, petroleum products, and sand and gravel. Desha County in Arkansas qualifies as an area of "substantial and persistent" unemployment. The average annual benefits, based on July 1968 price levels, are as follows:

Annual Benefits	**Amount**
Navigation	$40,470,000
Power	14,838,900
Channel Stabilization	6,575,000
Flood Control	6,602,600
Water Supply	828,900
Fish and Wildlife	312,000
Recreation	2,297,000
Area Redevelopment	3,355,800
Total	$75,280,200

FISCAL YEAR 1996: The total program amount, including the requested and programmed carryover amounts of $6,000,000 and $2,000,000, respectively, will be applied as follows:

Continue Land Acquisition	$4,600,000
Complete Land Acquisition for Montgomery Point L&D	400,000
Planning, Engineering and Design for Montgomery Point L&D	3,000,000
Total	$8,000,000

NON-FEDERAL COST: Local interests are required to provide adequate terminal and transfer facilities for navigation and bear the increased cost of maintenance and operation of all altered rail and highway routes, including bridges and appurtenances and utilities and other existing improvements, other than federally owned.

STATUS OF LOCAL COOPERATION: Prior to authorization of the project, local interests furnished written assurances that they would construct suitable public terminals. The requirements relative to increased cost of maintenance and operation of altered facilities apply to the owners of these facilities and were covered during negotiations of relocations contracts for the alteration of the various facilities.

Laws enacted in 1959 by the States of Arkansas and Oklahoma authorized the organization and operation of port authorities and permitted political subdivisions to engage in port activities. Port authorities have been organized to develop facilities in Oklahoma for the Tulsa-Rogers counties and the city of Muskogee and these ports are in operation.

In the State of Arkansas, port authorities have been organized to develop public port and harbor facilities at Fort Smith, Van Buren, Clarksville, Dardanelle-Russellville, Morrilton, Little Rock, North Little Rock, Ozark, and Pine Bluff-Jefferson County Area. The Clarksville Port Authority has acquired a 28-acre tract of land for the development of its port facility. The Fort Smith, Little Rock, and Pine Bluff-Jefferson County Ports are in operation.

In addition to the public ports discussed above, 35 companies are developing private port facilities along the navigation route in the State of Arkansas.

There are no other cost sharing or repayment requirements applicable to the project.

COMPARISON OF FEDERAL (CORPS OF ENGINEERS) COST ESTIMATES: The current Federal (Corps of Engineers) cost estimate of $649,000,000 is an increase of $4,800,000 from the latest estimate ($644,200,000) submitted to Congress (FY 1995). This change includes the following items:

Item	**Amount**
Additional Functions Added Under General Authority	$3,852,000
Price Escalation on Real Estate	948,000
Total	$4,800,000

STATUS OF ENVIRONMENTAL IMPACT STATEMENT: The overall project is essentially complete and in operation. The Final Operating and Maintenance Environmental Impact Statement for the McClellan-Kerr Arkansas River Navigation System in the Little Rock District was filed with the Council on Environmental Quality on 6 March 1975. The final Environmental Impact Statement for Tulsa District was filed with the Council on Environmental Quality on 28 July 1975. The final Environmental Impact Statement for the Montgomery Point Lock and Dam was filed with the Environmental Protection Agency on 28 June 1991.

OTHER INFORMATION: Funds to initiate preconstruction planning were appropriated in FY 1949 and for construction in FY 1963. During the last decade, the low water level in the Mississippi River has caused delays in navigation on the White River portion of the system. The Waterways Experiment Station has performed model studies to determine if any modifications can be made in the Entrance Channel to improve navigation. Studies confirmed an additional lock and dam (Montgomery Point Lock and Dam) in the Entrance Channel is the only physical solution that would improve navigation, and is economically justified. The construction cost for the Montgomery Point Lock and Dam is estimated to be $200,000,000. Only $841,000 to purchase real estate and $16,159,000 to continue engineering and design through fiscal year 1996 is included in this project cost estimate. The real estate estimate includes the cost to purchase 703 acres that will be used to mitigate the construction of Montgomery Point Lock and Dam.

APPROPRIATION TITLE: Construction, General - Local Protection (Flood Control)

PROJECT: Alamosa, Colorado (Continuing)

LOCATION: The project is located along the Rio Grande within the community of Alamosa, Colorado.

DESCRIPTION: The project consists of a levee system which will replace and augment the existing spoil bank levees in Alamosa, Colorado.

AUTHORIZATION: Water Resources Development Act of 1992.

REMAINING BENEFIT - REMAINING COST RATIO: 1.5 to 1 at 8 1/2 percent.

TOTAL BENEFIT - COST RATIO: 1.3 to 1 at 8 1/2 percent.

INITIAL BENEFIT - COST RATIO: 1.3 to 1 at 8 1/2 percent (FY 1994).

BASIS OF BENEFIT - COST RATIO: Benefits are from the Project Design Memorandum dated April 1993 at October 1993 price levels.

SUMMARIZED FINANCIAL DATA			**ACCUM. PCT. OF EST. FED. COST**
Estimated Federal Cost		$ 5,950,000	
Estimated Non-Federal Cost		2,050,000	
Cash Contribution	$ 490,000		
Other Costs	1,560,000		
Total Estimated Project Cost		$ 8,000,000	
Allocations to 30 September 1994		$ 1,034,000	
Conference Allowance for FY 1995		2,000,000	
Allocation for FY 1995		1,683,000 1/	
Allocations through FY 1995		2,717,000 2/	46

STATUS (1 Jan 1995)	**PERCENT COMPLETE**	**PHYSICAL COMPLETION SCHEDULE**
Entire Project	0	Jun 1997

PHYSICAL DATA

Levees - 21,800 feet and 11,700 feet of earthen levee along the right and left banks respectively of the Rio Grande through Alamosa, Colorado.

Mitigation - Create 10.4 acres of wetlands.

Recreation - 15,000 feet asphalt trail,
5 rest stops

1/ Reflects $317,000 reduction assigned as savings and slippage.
2/ Reflects $1,820,000 in programmed carryover into FY 1996.

Division: Southwestern **District: Albuquerque** **Project: Alamosa, Colorado**

SUMMARIZED FINANCIAL DATA (continued)

		ACCUM. PCT. OF EST. FED. COST
Allocations Requested for FY 1996	600,000	56
Programmed Balance to Complete after FY 1996	2,633,000	
Unprogrammed Balance to Complete after FY 1996	0	

JUSTIFICATION: The value of property within the 100-year flood plain is valued at $127,000,000. Residential property within the 100-year flood plain is worth $42,000,000. The project provides 100-year flood protection to the city of Alamosa and the unincorporated area of East Alamosa. Flood flows occurred on the Rio Grande at Alamosa in 1884 and 1921, with flows estimated at 20,000 and 18,000 cubic feet per second (cfs), respectively. The amount of damages is unknown. From 1985 to 1987, flows on the Rio Grande of up to 5,100 cfs (the 7-year event) through Alamosa would have caused flood damage to the City if it had not been for intensive flood fighting efforts. Mitigation measures will consist of the creation of a 10.4 acre wetland from the project construction borrow pit. Average annual flood inundation damages within the Alamosa area are estimated at $1,169,000 (October 1993 prices).

Annual Benefits	**Amount**
Flood Control	$ 856,000
Recreation	21,500
Total	$ 877,500

FISCAL YEAR 1996: The total program amount, including the requested and programmed carryover amounts of $600,000 and $1,820,000, respectively, will be applied as follows:

Initiate Levee Construction	$ 900,000
Initiate and complete Fish and Wildlife Mitigation	30,000
Complete real estate acquisition	1,290,000
Planning, Engineering and Design	100,000
Construction Management	100,000
Total	$ 2,420,000

NON-FEDERAL COST: In accordance with the cost sharing and financing concepts reflected in the Water Resources Development Act of 1986, the non-Federal sponsor must comply with the requirements listed below.

Requirements of Local Cooperation	Payments During Construction and Reimbursements	Annual Operation, Maintenance, Repair, Rehabilitation and Replacement Costs
Provide lands, easements, rights of way, and borrow and excavated or dredged material disposal areas, which may be reduced for credit allowed based on prior work (Section 104 of the Water Resources Development Act of 1986 or Section 215 of the Flood Control Act of 1968) after reductions for such credit have been made in the required cash payments.	$ 220,000	
In-Kind Credit under Section 104 of Water Resources Development Act 1986	1,340,000	
Pay one-half of the separable costs allocated to recreation (except recreational navigation) and bear all costs of operation, maintenance, repair, rehabilitation and replacement of recreation facilities.	100,000	$ 2,000
Pay 5 percent of the costs allocated to flood control to bring the total non-Federal share of flood control costs to 25 percent and bear all costs of operation, maintenance, repair, rehabilitation and replacement of flood control facilities.	390,000	20,000
Total Non-Federal Costs	$ 2,050,000	$22,000

The non-Federal sponsor has also agreed to make all required payments concurrently with project construction.

STATUS OF LOCAL COOPERATION: The Project Cooperation Agreement for construction of the Alamosa, Colorado project was executed with the city of Alamosa, Colorado on 4 January 1995. The current non-Federal cost estimate of $2,050,000, which includes a cash contribution of $490,000, is the same as the non-Federal estimate noted in the Project Cooperation Agreement. Our analysis of the non-Federal sponsor's financial capability to participate in the project affirms that the sponsor has a reasonable and implementable plan for meeting its financial commitment, including annual operation and maintenance costs. The City has received $1,340,000 of in-kind credit under Section 104 of the Water Resources Development Act of 1986 for its construction of a portion of the project.

COMPARISON OF FEDERAL COST ESTIMATES: The current Federal cost estimate of $5,950,000 is a decrease of $150,000 from the latest estimate ($6,100,000) presented to Congress (FY 1995). This change includes the following items.

Item	**Amount**
Price Escalation on Construction Features	$ (-) 150,000
Total	$ (-) 150,000

STATUS OF ENVIRONMENTAL IMPACT STATEMENT: The final Environmental Assessment was completed in October 1990. The Finding of No Significant Impact was signed by the District Engineer on 19 October 1990.

OTHER INFORMATION: Funds to initiate preconstruction engineering and design were appropriated in FY 1990 and funds to initiate construction were appropriated in Fiscal Year 1994. The project was authorized for construction in the Water Resources Development Act of 1992 (PL 102-580). The local sponsor has received credit for the portion of the recommended project they have already constructed at a cost of $1.34 million. Fish and Wildlife costs for mitigation is $30,000. The scheduled completion date of June 1997 for programmed work is a slippage from the latest completion date of January 1997 presented to Congress. This change is due to a delay in the execution of the Project Cooperation Agreement in order for the non-Federal sponsor to finalize the financial plan.

APPROPRIATION TITLE: Construction, General - Local Protection (Flood Control)

PROJECT: Alamogordo, New Mexico (Continuing)

LOCATION: The project is located in Otero County, in and near Alamogordo, New Mexico. The City of Alamogordo is situated at the foot of the Sacramento Mountains near the eastern edge of the Tularosa (Closed) Basin.

DESCRIPTION: The project consists of a concrete and rip-rap lined diversion channel with Standard Project Flood flow capacity which will intercept flood flows from the Sacramento Mountains east of the City.

AUTHORIZATION: Flood Control Act of 1962.

REMAINING BENEFIT - REMAINING COST RATIO: 4.5 to 1 at 8 7/8 percent.

TOTAL BENEFIT - COST RATIO: 4.2 to 1 at 8 7/8 percent.

INITIAL BENEFIT - COST RATIO: 4.6 to 1 at 8 7/8 percent (FY 1988).

BASIS OF BENEFIT - COST RATIO: Benefits are from Supplement No. 1 to General Design Memorandum No. 1 at October 1987 price levels.

SUMMARIZED FINANCIAL DATA			**ACCUM. PCT. OF EST. FED. COST**
Estimated Federal Cost		$31,800,000	
Estimated Non-Federal Cost		10,600,000	
Cash Contribution	$ 7,100,000		
Other Costs	3,500,000		
Total Estimated Project Cost		$42,400,000	
Allocations to 30 September 1994		2,806,000	
Conference Allowance for FY 1995		400,000	
Allocation for FY 1995		337,000 1/	
Allocations through FY 1995		3,143,000 2/	10

STATUS (1 Jan 1995)	**PERCENT COMPLETE**	**PHYSICAL COMPLETION SCHEDULE**
Entire Project	0	Being Determined

PHYSICAL DATA

Channel:
Length - 29,500 ft.
Concrete - 8,300 ft.
Rip rap - 21,200 ft.
Eight mainline drop structures
Twenty-one side inlet structures

Relocations:
Two railroad bridges ($700,000)

Levees:
Length - 1,950 ft.
Crown Width - 10 -12 ft.
Height - 0 - 8 ft.
Freeboard - 0 ft.

1/ Reflects $63,000 reduction assigned as savings and slippage.
2/ Reflects $120,000 in programmed carryover into FY 1996.

SUMMARIZED FINANCIAL DATA (continued)		ACCUM. PCT. OF EST. FED. COST
Allocation Requested for FY 1996	100,000	10
Programmed Balance to Complete after FY 1996	28,557,000	
Unprogrammed Balance to Complete after FY 1996	0	

JUSTIFICATION: There are no well-defined watercourses in the Tularosa (Closed) Basin. Many canyons and arroyos which descend to the valley floor from the mountains bordering the basin carry the runoff. Several arroyos head on the west slope of the Sacramento Mountains and flow westward through the city of Alamogordo, causing extensive damage to residential and business properties, schools and churches, utilities, streets, highways, roads, and other public properties. The major problem arroyos from north to south are Dry, Beeman, Marble, and Alamo Canyons. Also several minor unnamed arroyos in the vicinity contribute to the problem. Estimated total property valuation of the area in the standard project flood plain is $585,000,000 (1 October 1994). Estimated damages from an occurrence of the standard project flood under present conditions are $185,000,000. Records indicate that from 1935 through 1959, eleven floods exceeded the capacity of railroad drainage structures in the area, overtopping the tracks by as much as two feet. Floods on 17 and 26 August 1959 caused estimated damages of $240,000 and $57,000, respectively. These damages, based on 1 October 1994 price levels, would be $1,900,000 and $450,000, respectively. Other minor flooding, occurring as recently as 1979 and 1984, have caused City officials to be concerned about the flood threat. The average annual benefits are $12,207,500, all flood control, based on October 1987 price levels.

FISCAL YEAR 1996: The total program amount, including the requested and programmed carryover amount of $100,000 and $120,000, respectively, will be applied as follows:

Planning, Engineering and Design	$220,000
Total	$220,000

NON-FEDERAL COST: In accordance with the cost sharing and financing concepts reflected in the Water Resources Development Act of 1986, the non-Federal sponsor must comply with the requirements listed below.

Requirements of Local Cooperation	Payments During Construction and Reimbursements	Annual Operation, Maintenance, Repair Rehabilitation and Replacement Cost
Provide lands, easements, rights of way, and borrow and excavated or dredged material disposal areas.	$ 1,140,000	
Modify or relocate utilities, roads, bridges (except railroad bridges), and other facilities, where necessary for the construction of the project.	2,360,000	
Pay 17 percent of the costs allocated to flood control to bring the total non-Federal share of flood control costs to 25 percent, and bear all costs of operation, maintenance, repair, rehabilitation and replacement of flood control facilities.	7,100,000	$ 48,000
Total Non-Federal Cost	$10,600,000	$ 48,000

The non-Federal sponsor has also agreed to make all required payments concurrently with project construction.

STATUS OF LOCAL COOPERATION: In October 1991, the City voted against proceeding with the project as designed and asked that the U.S. Army Corps of Engineers continue studying the flood problem to develop a fresh approach to a flood control solution. By letter dated 18 December 1992, the City emphasized their support and commitment to proceeding with General Reevaluation of flood control alternatives. The City reaffirmed their desire for U.S. Army Corps of Engineers assistance at a recent In-Progress Review Conference held in March 1994. The Project Cooperation Agreement with the city of Alamogordo, New Mexico, is scheduled to be executed in September 1998.

COMPARISON OF FEDERAL COST ESTIMATES: The current Federal cost estimate of $31,800,000 (1 October 1994) is a decrease of $900,000 from the latest estimate ($32,700,000) presented to Congress (FY 1995). This change includes the following items.

Item	Amount
Price Escalation on Construction Features	$ (-) 900,000
Total	$ (-) 900,000

STATUS OF ENVIRONMENTAL IMPACT STATEMENT: The Environmental Assessment and Finding of No Significant Impact (FONSI) was signed in April 1988. The environmental report for the General Reevaluation Report is scheduled for completion in January 1998.

OTHER INFORMATION: The city of Alamogordo has been working with the U.S. Army Corps of Engineers and the New Mexico Congressional Delegation for over thirty years seeking a solution to the flood threat from the Sacramento Mountains located east of the City. Funds to initiate construction of the diversion channel were appropriated in Fiscal Year 1988. Work was discontinued in September 1988, without a contract being awarded, because the City could not give assurances of local cooperation due to the failure of a bond issue. To satisfy the concerns expressed by the City Commissioners and area residents, additional alternative solutions were investigated and are outlined in the Interim Letter Report dated August 1992. The letter report recommends reevaluation of the project through the preparation of a General Reevaluation Report. The General Reevaluation Report will address alternatives to the old Standard Project Flood protection plan. The new alternatives may be constructed in phases and therefore can more easily be afforded by the sponsor. To that end, the City provided a letter of intent emphasizing their commitment and support for further analysis. Preparation of the General Reevaluation Report began in July 1993 and is scheduled for completion in January 1998, with Washington level approval scheduled for June 1998.

APPROPRIATION TITLE: Construction, General - Local Protection (Flood Control)

PROJECT: Middle Rio Grande Flood Protection, Bernalillo to Belen, New Mexico (Continuing)

LOCATION: The project is located on the Middle Rio Grande between the cities of Bernalillo and Belen, New Mexico.

DESCRIPTION: The plan of improvement consists of raising and rehabilitating 51.5 miles of levees to provide the 270-year level of protection, and the creation of 75 acres of wetlands from borrow areas within the bosque, and acquisition of 200 acres to satisfy fish and wildlife mitigation requirements.

AUTHORIZATION: Water Resources Development Act of 1986.

REMAINING BENEFIT - REMAINING COST RATIO: 1.8 to 1 at 8-7/8 percent.

TOTAL BENEFIT - COST RATIO: 1.6 to 1 at 8-7/8 percent.

INITIAL BENEFIT - COST RATIO: 1.3 to 1 at 8-7/8 percent (FY 1991)

BASIS OF BENEFIT - COST RATIO: Benefits for the Belen Unit are from the General Design Memorandum approved in June 1986 at January 1986 price levels. The economic analysis and assumptions contained in the June 1986 General Design Memorandum were verified in May 1990. Benefits for the Corrales Unit are from the August 1994 Limited Reevaluation Report at 1994 price levels.

SUMMARIZED FINANCIAL DATA			**ACCUM. PCT. OF EST. FED. COST**
Estimated Federal Cost		$45,300,000	
Estimated Non-Federal Cost		15,100,000	
Cash Contribution	$ 9,850,000		
Other	5,250,000		
Total Estimated Project Cost		$60,400,000	
Allocations to 30 September 1994		$ 3,675,000	
Conference Allowance for FY 1995		3,800,000	
Allocation for FY 1995		3,199,000 1/	
Allocations through FY 1995		6,874,000 2/	15

STATUS (1 Jan 1995)	**PERCENT COMPLETE**	**PHYSICAL COMPLETION SCHEDULE**
Entire Project	0	Being Determined

PHYSICAL DATA

Levees - 51.5 Miles
Corrales - 12.5 Miles
Belen - 39.0 Miles

1/ Reflects $601,000 reduction assigned as savings and slippage.

2/ Reflects $3,840,000 in programmed carryover into FY 1996.

Division: **Southwestern** **District:** **Albuquerque** **Project:** **Middle Rio Grande Flood Protection, Bernalillo to Belen, New Mexico**

SUMMARIZED FINANCIAL DATA (Continued)		**ACCUM. PCT. OF EST. FED. COST**
Allocation Requested for FY 1996	0	15
Programmed Balance to Complete after FY 1996	38,426,000	
Unprogrammed Balance to Complete after FY 1996	0	

JUSTIFICATION: The project is located along the Middle Rio Grande from the vicinity of Bernalillo to Belen, New Mexico, and contains 45 square miles of floodplain. Major developed areas which will be protected include the municipalities of Corrales, Los Lunas, Bosque Farms, and Belen. The valley has experienced growth with conversion of agricultural lands to urban and suburban land use. Approximately 30,000 residents and $920,000,000 worth of property are currently located in the 270-year floodplain. The flood threat stems from a 1,100 square mile uncontrolled drainage area upstream from the study reach which is capable of generating floodflows on the Rio Grande from summer storms which exceed the capacity of the existing spoilbank levee system. The average annual benefits are $6,628,600, based on January 1986 price levels for the Belen Unit and 1994 price levels for the Corrales Unit.

Annual Benefits	**Amount**
Flood Control	$6,398,600
Redevelopment	230,000
Total	$6,628,600

FISCAL YEAR 1996: The total program amount, including the requested and programmed carryover amounts of $0 and $3,840,000, respectively, with an unobligated carryover of $1,412,000 into FY 1997, will be applied as follows:

Initiate Construction Corrales Levee Reach	$1,900,000
Planning, Engineering and Design	318,000
Construction Management	210,000
Total	$2,428,000

NON-FEDERAL COST: In accordance with the cost sharing and financing concepts reflected in the Water Resources Development Act of 1986, the non-Federal sponsor must comply with the requirements listed below.

Requirements of Local Cooperation	**Payments During Construction and Reimbursement**	**Annual Operation, Maintenance, Repair, Rehabilitation and Replacement Costs**
Corrales Reach:		
Provide lands, easements, rights of way, and borrow and excavated or dredged material disposal areas.	$ 180,000	
Modify or relocate utilities, roads, bridges (except railroad bridges), and other facilities, where necessary for the construction of the project.	70,000	
Pay 22.8 percent of the costs allocated to flood control to bring the total non-Federal share of flood control costs to 25 percent, and bear all costs of operation, maintenance, repair, rehabilitation and replacement of flood control facilities.	2,650,000	$ 47,000
Belen Reach:		
Provide lands, easements, rights of way, and borrow and excavated or dredged material disposal areas.	3,500,000	
Modify or relocate utilities, roads, bridges (except railroad bridges), and other facilities, where necessary for the construction of the project.	1,500,000	
Pay 22.5 percent of the costs allocated to flood control to bring the total non-Federal share of flood control costs to 25 percent, and bear all costs of operation, maintenance, repair, rehabilitation, and replacement of flood control facilities.	7,200,000	149,000
Total Non-Federal Costs	$15,100,000	$196,000

The non-Federal sponsor has also agreed to make all required payments concurrently with project construction.

STATUS OF LOCAL COOPERATION: By letter dated 2 June 1986, the Middle Rio Grande Conservancy District stated support for the project, and indicated a willingness to financially participate in project construction in accordance with cost sharing and financing principles contained in the Water Resources Development Act of 1986. The District agreed to enter into the Project Cooperation Agreement by Board vote on 8 June 1992. The Middle Rio Grande Conservancy District has received a total of $650,000 from the New Mexico State Legislature and a $1,800,000 grant from the New Mexico Interstate Stream Commission to provide funds for their cash contributions and relocations. The Corrales Unit's Project Cooperation Agreement with the Middle Rio Grande Conservancy District is scheduled to be executed in May 1995.

COMPARISON OF FEDERAL COST ESTIMATES: The current Federal cost estimate of $45,300,000 is an increase of $ 700,000 from the latest estimate ($44,600,000) presented to Congress (FY 1995).

Item	**Amount**
Price Escalation on Construction Features	$(-) 1,000,000
Design Changes	1,700,000
Total	$ 700,000

STATUS OF ENVIRONMENTAL IMPACT STATEMENT: The Environmental Assessment and FONSI for the Corrales Reach was scheduled for signature in August 1994; however, the inclusion of the willow fly catcher and the Rio Grande silvery minnow on the proposed Endangered Species list required extensive additional formal consultation with the United States Fish and Wildlife Service. The FONSI is now scheduled to be signed in March 1995.

OTHER INFORMATION: In spite of the existing main stem projects there remains a residual flood threat which results in recurring damages currently estimated at $7,800,000 annually in the project area. Residents of low-lying areas desire relief from flooding problems. The most recent flood event occurred in 1979 and caused $1,200,000 in damages. Funds to initiate preconstruction engineering and design were appropriated in Fiscal Year 1986. Funds to initiate construction were appropriated in Fiscal Year 1991. The estimated cost of Fish and Wildlife mitigation is $900,000.

APPROPRIATION TITLE: Construction, General - Local Protection (Flood Control)

PROJECT: Rio Grande Floodway, San Acacia to Bosque del Apache Unit, New Mexico (Continuing)

LOCATION: The project is located along the Rio Grande, extending from the upper end of the Rio Grande low-flow conveyance channel at the San Acacia diversion works to the head of Elephant Butte Reservoir.

DESCRIPTION: The plan of improvement consists of the reconstruction of 55 miles of existing spoil bank levee which separates the Rio Grande low flow conveyance channel from the cleared floodway. The level of protection is a discharge of 46,000 c.f.s. at Socorro, New Mexico, corresponding to an exceedance interval of 100 years.

AUTHORIZATION: Flood Control Act of 1948 and Water Resources Development Act of 1992.

REMAINING BENEFIT - REMAINING COST RATIO: 2.3 to 1 at 8-7/8 percent.

TOTAL BENEFIT - COST RATIO: 2.2 to 1 at 8-7/8 percent.

INITIAL BENEFIT - COST RATIO: 2.2 to 1 at 8-7/8 percent (FY 1992).

BASIS OF BENEFIT - COST RATIO: Benefits are from the Appendix to the Project Decision Document dated December 1993 at October 1993 price levels.

SUMMARIZED FINANCIAL DATA			**ACCUM. PCT. OF EST. FED. COST**
Estimated Federal Cost		$53,200,000	
Estimated Non-Federal Cost		7,600,000	
Cash Contribution	$4,900,000		
Other Costs	2,700,000		
Total Estimated Project Cost		$60,800,000	
Allocations to 30 September 1994		8,433,000	
Conference Allowance for FY 1995		1,000,000	
Allocation for FY 1995		842,000 1/	
Allocations through FY 1995		9,275,000 2/	17

STATUS (1 Jan 1995)	**PERCENT COMPLETE**	**PHYSICAL COMPLETION SCHEDULE**
Entire Project	0	Being Determined

PHYSICAL DATA

Levees - 55 Miles

1/Reflects $158,000 reduction assigned as savings and slippage.

2/Reflects $6,670,000 in programmed carryover into FY 1996.

SUMMARIZED FINANCIAL DATA (continued)		ACCUM. PCT. OF EST. FED. COST
Allocation Requested for FY 1996	0	17
Programmed Balance to Complete after FY 1996	43,925,000	
Unprogrammed Balance to Complete after FY 1996	0	

JUSTIFICATION: The value of property within the 100-year flood plain is valued at $270,000,000. Residential property within the 100-year flood plain is worth $37,000,000. The Rio Grande low-flow conveyance channel, built by the U.S. Bureau of Reclamation in 1961, is the primary damageable property in the project area. Cost to construct the channel at October 1994 price levels would be $93,000,000. The U.S. Bureau of Reclamation estimates that following a flood severe enough to breach the spoil-bank levee separating the low-flow conveyance channel from the adjacent floodway, the low-flow conveyance channel would be obliterated and out of service for at least five years. As much as 455,000 acre-feet of water would be lost over such a five-year period, with an economic value of $87,000,000. Loss of the channel would also have international significance, as the 1906 Treaty with Mexico requires the delivery of 60,000 acre-feet of water annually. Single occurrence damages from the one percent chance floods are $187,000,000. Average annual damages without the project are $12,996,000 and with the project are $806,000. The project will provide protection from the 100-year flood. The flood of record, in September 1929, produced a peak discharge of 60,000 cubic feet per second on the Rio Grande at the San Acacia gage. Irrigation and transportation facilities were either disrupted or destroyed. Over 90 percent of the irrigated farmland in a 60 mile reach of the Rio Grande was severely damaged, and the original villages of San Acacia, San Antonio, and San Marcial were destroyed. Damages sustained at that time were $1,500,000; under current conditions and prices the damages would be $193,000,000. The last major flood event occurred in 1965 with minor flooding in 1967 and 1979. The project avoids long and short term impacts associated with the destruction or modification of wetlands; in fact, the project protects existing wetlands at Bosque del Apache National Wildlife Refuge. Average annual benefits are $12,190,000, all flood control, based on October 1993 price levels.

FISCAL YEAR 1996: The total program amount, including the requested and programmed carryover amounts of $0 and $6,670,000, respectively, with an unobligated carryover of $6,400,000 into FY 1997, will be applied as follows:

Planning, Engineering and Design	$ 270,000
Total	$ 270,000

NON-FEDERAL COST: In accordance with the cost sharing and financing concepts reflected in the Water Resources Development Act of 1986, and the Water Resources Development Act of 1992, PL 102-580, Section 102(S), the non-Federal sponsor must comply with the requirements listed below.

Requirements of Local Cooperation	**Payments During Construction and Reimbursements**	**Annual Operation, Maintenance, Repair, Rehabilitation, and Replacement Costs**
Modify or relocate utilities, roads, bridges (except railroad bridges), and other facilities, where necessary for the construction of the project.	$2,700,000	
Pay 8.1 percent of the costs allocated to flood control to bring the total non-Federal share of flood control costs to 12.5 percent, and bear all costs of operation, maintenance, repair, rehabilitation and replacement of flood control facilities.	4,900,000	$168,000
Total Non-Federal Cost	$7,600,000	$168,000

The non-Federal sponsor has also agreed to make all required payments concurrently with project construction.

STATUS OF LOCAL COOPERATION: The Middle Rio Grande Conservancy District supports the authorized levee project, as currently modified, to provide needed flood protection to the Middle Rio Grande Valley below San Acacia. By letter dated 23 July 1991, the New Mexico State Engineer indicated that funding for a portion of the non-Federal share of the project may be provided by the New Mexico Interstate Stream Commission from the Improvement of the Rio Grande Income Fund. The Middle Rio Grande Conservancy District may also solicit the financial support of other project beneficiaries. The Project Cooperation Agreement is scheduled to be executed in May 1996.

COMPARISON OF FEDERAL COST ESTIMATES: The current Federal cost estimate of $53,200,000 is an increase of $2,800,000 from the latest estimate ($50,400,000) presented to Congress (FY 1995). This change includes the following items.

Item	**Amount**
Price Escalation on Construction Features	$2,013,000
Design Changes	787,000
Total	$2,800,000

STATUS OF ENVIRONMENTAL IMPACT STATEMENT: The final Environmental Impact Statement was filed in September 1992.

OTHER INFORMATION: Funds to initiate Preconstruction Engineering and Design were appropriated in Fiscal Year 1987 and funds to initiate construction were appropriated in Fiscal Year 1992. The cost of fish and wildlife mitigation is $1,010,000 based on 1 October 1994 price levels.

APPROPRIATION TITLE: Construction, General - Local Protection (Flood Control)

PROJECT: Fry Creeks, Bixby, Oklahoma (Continuing)

LOCATION: The project is located in the northern part of the city of Bixby, Tulsa County, Oklahoma.

DESCRIPTION: The project consists of enlarging both Fry Creeks, diverting Fry Creek 1 into Fry Creek 2 and then diverting the combined creeks into the Arkansas River. The total length of the modified channels would total 4.3 miles, bottom widths of 30 to 225 feet; and depths of 6 to 12 feet. Three bridges will be constructed and 20 acres of land will be acquired for mitigation of fish and wildlife losses.

AUTHORIZATION: Water Resources Development Act of 1986.

REMAINING BENEFIT-REMAINING COST RATIO: 2.0 to 1 at 8 percent.

TOTAL BENEFIT-COST RATIO: 2.0 to 1 at 8 percent.

INITIAL BENEFIT TO COST RATIO: 2.3 to 1 at 8 3/4 (FY 1993)

BASIS OF BENEFIT-COST RATIO: Benefits are from the latest available evaluation submitted in May 1994 at 1993 price levels.

SUMMARIZED FINANCIAL DATA			**ACCUM. PCT. OF EST. FED. COST**
Estimated Federal Cost		$ 13,425,000	
Estimated Non-Federal cost		4,475,000	
Cash Contribution	$2,075,000		
Other Costs	2,400,000		
Total Estimated Project Cost		$ 17,900,000	
Allocations to 30 September 1994		2,100,000	
Conference Allowance for FY 1995		1,000,000	
Allocation for FY 1995		842,000 1/	

STATUS (1 JAN 1995)	**PERCENT COMPLETE**	**PHYSICAL COMPLETION SCHEDULE**
Entire Project	0	Being Determined

PHYSICAL DATA

Grass Lined Channels: Length - 4.3 miles
Bottom Width - 30 to 225 feet

1/ Reflects $158,000 reduction assigned as savings and slippage.

SUMMARIZED FINANCIAL DATA (Continued)		ACCUM. PCT. OF EST. FED. COST
Allocations through FY 1995	2,942,000 1/	22
Allocation Requested for FY 1996	1,700,000	35
Programmed Balance to Complete after FY 1996	8,783,000	
Unprogrammed Balance to Complete after FY 1996	0	

1/ Reflects $850,000 in programmed carryover into FY 1996.

JUSTIFICATION: The project will provide protection from periodic floods which have inundated the city numerous times in past years during periods of heavy spring and summer rains and storms. The flood of record occurred in June 1974 and caused damages estimated at $2,526,000 using 1 October 1994 price levels. The Arkansas River flooded in October 1986 so close to Fry Creek, damage could not be separated. The project would provide protection from the 100-year flood for about 1,100 acres of land, 400 residences, 22 businesses, 3 churches and a fire station, as well as streets, utilities, farm equipment and crops. Average annual benefits are $3,567,000, all flood damage prevention, based on October 1993 price levels.

FISCAL YEAR 1996: The total program amount, including the requested and programmed carryover amounts of $1,700,000 and $850,000, respectively, will be applied as follows:

Initiate Construction	$2,373,000
Planning Engineering & Design	20,000
Construction Management	157,000
Total	$2,550,000

NON-FEDERAL COST: In accordance with the cost sharing and financing concepts reflected in the Water Resources Act of 1986, the non-Federal sponsor must comply with the requirements listed below.

Requirements of Local Cooperation	Payments During Construction	Annual Operation, Maintenance, Repair Rehabilitation and Replacement Costs
Provide lands, easements, rights-of-way and dredged material disposal areas.	$1,274,000	
Modify or relocate utilities, roads, bridges (except railroad bridges and other facilities, where necessary in the construction of the project.	$1,126,000	

NON-FEDERAL COST (Continued):

Requirements of Local Cooperation	**Payments During Construction**	**Annual Operation, Maintenance, Repair Rehabilitation and Replacement Costs**
Pay 11.59 percent of the costs allocated to flood control to bring the total non-Federal share of flood control costs to 25 percent, and bear all cost of operation, maintenance and replacement of flood control facilities.	$2,075,000	$193,100
Total Non-Federal Costs	$4,475,000	$193,100

The non-Federal sponsor has also agreed to make all required payments concurrently with project construction.

STATUS OF LOCAL COOPERATION: The city of Bixby, Oklahoma reaffirmed strong support of the project by letter dated 22 March 1994. A bond election held 25 August 1992 was successful thereby allowing the sponsor to prepare the required financial statement for the project. The Project Cooperation Agreement was executed on 24 January 1995.

COMPARISON OF FEDERAL COST ESTIMATES: The Federal cost estimate of $13,425,000 is a decrease of $1,375,000 from the estimate ($14,800,000) as last presented to Congress (FY 1995). This change includes the following items.

ITEM	**AMOUNT**
Price Escalation on Construction Features	$ 511,000
Other Estimating Adjustments	(-)1,886,000
Total	$(-)1,375,000

STATUS OF ENVIRONMENTAL IMPACT STATEMENT: The final Environmental Impact Statement was filed with the Environmental Protection Agency on 18 March 1983.

OTHER INFORMATION: Funds to initiate preconstruction engineering and design were appropriated in Fiscal Year 1988 and funds to initiate construction were appropriated in Fiscal Year 1993. Authorization of the project, as set forth in the Water Resources Development Act of 1986, provides that the project also include acquisition of 20 acres of land for mitigation of fish and wildlife losses and that the lands, to the extent feasible, be contiguous to the project, and be in a corridor not less than 50 feet wide. The project requires a 20-acre tract be acquired. The total estimated cost for mitigation at the project is $84,000 for acquisition of 20 acres of land and $18,000 for fencing and planting of shrubs.

APPROPRIATION TITLE: Construction, General - Local Protection (Flood Control)

PROJECT: Mingo Creek Tulsa, Oklahoma (Continuing)

LOCATION: The project is located in Tulsa County, Oklahoma. Approximately 90 percent of Mingo's 61 square-mile drainage area lies within the City of Tulsa.

DESCRIPTION: The project consists of 23 detention sites, 4.6 miles of rock, grass and concrete-lined channels on Mingo Creek, and 5.4 miles of concrete- and grass-lined channels on several tributaries. The city of Tulsa has completed approximately 4.75 miles of the channelization on Mingo Creek.

AUTHORIZATION: Water Resources Development Act of 1986.

REMAINING BENEFIT-REMAINING COST RATIO: 4.8 to 1.0 at 8-7/8 percent.

TOTAL BENEFIT-COST RATIO: 2.0 to 1.0 at 8-7/8 percent.

INITIAL BENEFIT-COST RATIO: 2.0 to 1.0 at 8-7/8 percent (FY 1988).

BASIS OF BENEFIT-COST RATIO: Benefits are from the latest available evaluation approved in December 1987 at 1987 price levels.

SUMMARIZED FINANCIAL DATA			**ACCUM. PCT. OF EST. FED. COST**	**STATUS (1 Jan 1995)**	**PERCENT COMPLETE**	**PHYSICAL COMPLETION SCHEDULE**
Estimated Federal Cost		$ 76,500,000		Entire Project	54	Being Determined
Estimated Non-Federal Cost		64,000,000				
Cash Contribution	$ 7,100,000					
Other Cost	56,900,000					
Total Estimated Project Cost		$140,500,000				
Allocations to 30 September 1994		48,669,000				
Conference Allowance For FY 1995		11,600,000				
Allocation for FY 1995		9,764,000 1/				

1/ Reflects $1,836,000 reduction assigned as savings and slippage.

SUMMARIZED FINANCIAL DATA (Continued)		ACCUM. PCT. OF EST. FED. COST
Allocations through FY 1995	$ 58,433,000 1/	76
Allocation Requested for FY 1996	4,400,000	82
Programmed Balance to Complete after FY 1996	13,667,000	
Unprogrammed Balance to Complete after FY 1996	0	

1/ Reflects $11,900,000 programmed carryover into FY 1996.

PHYSICAL DATA

Concrete Lined Channel:	Rock Lined Channel:	Grass Lined Channel:	
Length - 16,561 feet	Length - 2,800 Feet	Length - 29,838 feet	Dams: Detention Sites - 23
Bottom Width - 20-120 feet	Bottom Width - 200 feet		

JUSTIFICATION: On the average, Mingo Creek floods about once every 2-3 years. Since 1959, ten major floods have been recorded. Mingo Creek peaks quickly with little warning time to residents of approximately 3,100 homes in the flood plain. These floods rise rapidly within 30 minutes of a heavy rain, and recede quickly, after only one to six hours. A 100-year flood (full watershed urbanization) could rise four to eight feet in depth over the streambanks with a velocity of more than five feet per second. Such floods present great hazards to life and property. The flood of record occurred 26-27 May 1984, which caused an estimated $124,000,000 ($165,090,000 at October 1994 prices) damages in the Mingo Creek flood plain and resulted in 14 fatalities in the Tulsa area with five attributable to flooding from Mingo Creek. The average annual benefits are $32,237,000, all flood damage prevention, based on October 1987 price levels.

FISCAL YEAR 1996: The total program amount, including the requested and programmed carryover amounts of, $4,400,000 and $11,900,000, respectively, will be applied as follows:

Initiate Cooley Detention Dams and Channels	$1,200,000
Initiate Brookhollow Detention Dams	1,700,000
Continue Mainstem Phase III Detention Dams and Channels	2,675,000
Continue Tupelo Detention Dams	1,200,000
Continue Southern Tribs Phase II Detention Dams and Channels and Phase III Detention Dams	1,735,000
Continue Mill/Jones Detention Dams	2,400,000
Planning, Engineering and Design	86,000
Construction Management	934,000
Reimbursement to the City on Brookhollow and Tupelo	4,370,000
Total	$16,300,000

NON-FEDERAL COST: In accordance with the cost sharing and financing concepts reflected in Water Resources Development Act of 1986, the non-Federal sponsor must comply with the requirements listed below.

Requirements of Local Cooperation	Payments During Construction	Annual Operation Maintenance, Repair, Rehabilitation, and Replacement Costs
Provide lands, easements, rights-of-way and dredged material disposal areas.	$40,236,000	
Modify or relocate utilities, roads, bridges (except railroad bridges), and other facilities, where necessary for the construction of the project.	16,664,000	
Pay five percent of the costs allocated to flood control and bear all cost of operation, maintenance, repair, rehabilitation and replacement of flood control facilities.	7,100,000	$ 432,000
Total Non-Federal Costs	$64,000,000	$ 432,000

The non-Federal sponsor has also agreed to make all required payments concurrently with project construction.

STATUS OF LOCAL COOPERATION: The local sponsor is the city of Tulsa, Oklahoma. On 26 August 1983, the City adopted a Resolution of Assurance to provide a minimum share equal to 35 percent or the traditional lands, easements, and rights-of-way, whichever is greater, and will be required to assist in the actual financing of construction. The City has constructed 4.75 miles of channel and placed in flood control operation four excavated detention facilities. The Local Cooperation Agreement with the city of Tulsa, Oklahoma was executed on 22 January 1988. The current non-Federal cost estimate of $64,000,000 which includes a cash contribution of $7,100,000, is an increase of $6,174,000 from the non-Federal cost estimate of $57,826,000 noted in the Local Cooperation Agreement, which included a cash contribution of $7,756,000. The non-Federal sponsor is financially capable and willing to contribute the increased non-Federal share. Our analysis of the non-Federal sponsor's financial capability to participate in the project affirms that the sponsor has a reasonable and implementable plan for meeting its financial commitment.

COMPARISON OF FEDERAL COST ESTIMATES: The current Federal cost estimate of $76,500,000 is a decrease of $3,200,000 from the latest estimate ($79,700,000) presented to Congress (FY 1995). The change includes the following items:

ITEM		AMOUNT
Price Escalation on Construction Features	(-)	$ 721,000
Design Changes	(-)	2,479,000
Total	(-)	$ 3,200,000

STATUS OF ENVIRONMENTAL IMPACT STATEMENT: The final report was filed with the Environmental Protection Agency on 3 June 1981. A supplemental report is included in the General Design Memorandum.

OTHER INFORMATION: Funds to initiate preconstruction engineering and design were appropriated in Fiscal Year 1985. Funds to initiate construction were appropriated in Fiscal Year 1988. Due to the loss of bottom land hardwoods, it was necessary to mitigate a fish and wildlife plan which includes acquisition of hardwoods for preservation. The current cost estimate includes $573,000 for acquisition of 125 acres of land.

APPROPRIATION TITLE: Construction, General - Local Protection (Flood Control)

PROJECT: Beals Creek, Big Spring, Texas (Continuing)

LOCATION: The project is located in the city of Big Spring, Howard County, Texas.

DESCRIPTION: The project includes local protection features including channel improvement and relocations. The channel will be a trapezoidal grass-lined channel with an average depth of about 11 feet and a bottom width of 20 feet.

AUTHORIZATION: Section 201 of the 1965 Flood Control Act.

REMAINING BENEFIT-REMAINING COST RATIO: 2.6 to 1 at 8-3/4 percent.

TOTAL BENEFIT-COST RATIO: 1.2 to 1 at 8-3/4 percent.

INITIAL BENEFIT-COST RATIO: 1.3 to 1 at 8-3/4 percent (FY 1993).

BASIS OF BENEFIT-COST RATIO: Benefits are from the Design Memorandum dated June 1991 at March 1991 price levels.

SUMMARIZED FINANCIAL DATA			**ACCUM. PCT. OF EST. FED. COST**	**STATUS (1 Jan 1995)**	**PERCENT COMPLETE**	**PHYSICAL COMPLETION SCHEDULE**
Estimated Federal Cost		$3,950,000		Entire Project	8	Sep 1996
Estimated Non-Federal Cost		1,550,000				
Cash Contributions	$ 270,000					
Other Costs	1,280,000					
Total Estimated Project Cost		$ 5,500,000				
Allocations to 30 September 1994		1,314,000				
Conference Allowance for FY 1995		800,000				
Allocation for FY 1995		720,000 1/				
Allocations through FY 1995		2,034,000	51			

PHYSICAL DATA

Channels: 7280 feet - grass-lined
Concrete drop structure: One
Relocations: One - Railroad spur bridge

1/ Reflects $127,000 reduction assigned as savings and slippage and $47,000 reprogrammed to the project.

SUMMARIZED FINANCIAL DATA (Continued)		ACCUM. PCT. OF EST. FED. COST
Allocation Requested for FY 1996	1,916,000	100
Programmed Balance to Complete after FY 1996	0	
Unprogrammed Balance to Complete after FY 1996	0	

JUSTIFICATION: The improvements will provide a high degree of protection, which is economically feasible at this time, to the city of Big Spring, Texas, along Beals Creek. This project will protect a highly commercialized area of the city from the flooding which has been common since the founding of the city in 1882. The current population of Big Spring, according to the 1990 census, is 23,093 people. The most recent major flooding in the city were in September 1986 and May 1987 which caused an estimated $2,780,000 and $1,370,000 in damages, respectively. The loss was to commercial, transportation, and residential property within the city. A recurrence of these floods under current conditions and October 1994 price levels would result in damages estimated at $3,580,000 and $1,740,000, respectively. This project would prevent all of the September 1986 flood damages within the city. The city was flooded three times in 1992 by 2-5 year flood events, causing about $10,000 in damages each, primarily in the commercial area of the city. The estimated average annual benefits are $605,000, all flood control, based on March 1991 price levels.

FISCAL YEAR 1996: The requested amount will be applied as follows:

Complete Channel Improvement	$1,646,000
Planning, Engineering and Design	10,000
Construction Management	260,000
Total	$1,916,000

NON-FEDERAL COST: In accordance with the cost sharing and financial concepts reflected in the Water Resources Development Act of 1986, the non-Federal sponsor must comply with the requirements listed below:

Requirements of Local Cooperation	Payments During Construction and Reimbursements	Annual Operation, Maintenance, Repair, Rehabilitation and Replacement Costs
Provide lands, relocation payments, and assistance to displaced persons.	$ 94,000	
Modify and relocate/reconstruct channel dams, bridges and utilities.	1,186,000	
Pay five percent of the costs allocated to flood control and bear all costs of operations, maintenance and replacement of flood control facilities.	270,000	$ 22,000
Total Non-Federal Costs	$ 1,550,000	$ 22,000

The non-Federal sponsor has agreed to make all required payments concurrently with project construction.

STATUS OF LOCAL COOPERATION: The city of Big Spring by letter, dated May 5, 1993, expressed their continued support for the project. The city passed a bond referendum on October 10, 1992 to fund their share of the project. In addition, the city has continued to work with the Corps in order to complete this project in a timely manner. The Project Cooperation Agreement was signed on 10 March 1994 by the Assistant Secretary of the Army (CW).

COMPARISON OF FEDERAL COST ESTIMATES: The Federal cost estimate of $3,950,000 is an increase of $240,000 over the latest estimate ($3,710,000) submitted to Congress (FY 1995). This change includes the following items:

Item	Amount
Price Escalation on Construction Features	$ 61,000
Post Contract Award and Other Estimating Adjustments (including contingency adjustments)	179,000
Total	$ 240,000

STATUS OF ENVIRONMENTAL IMPACT STATEMENT: The Environmental Assessment and Finding of No Significant Impact for the proposed project were completed in January 1990. The Record of Environmental Consideration was signed on 28 June 1991. On 26 January 1994 a determination was made that the findings of the Record of Decision still apply.

OTHER INFORMATION: Funds to initiate preconstruction planning were appropriated in Fiscal Year 1987 and funds to initiate construction were appropriated in FY 1993.

APPROPRIATION TITLE: Construction, General - Local Protection (Flood Control)

PROJECT: Clear Creek, TX (Continuing)

LOCATION: The project is located about midway between the two metropolitan centers of Houston, Texas, on the north and Galveston-Texas City on the south in Harris and Galveston Counties above and below existing Clear Lake.

DESCRIPTION: The project provides for channel enlargement and easing of bends within the existing stream from Mile 3.8 to Mile 19.1, a second outlet with gated structure from Clear Lake to Galveston Bay, and replacements of riparian woodlands, brush, and wetlands to mitigate environmental effects.

AUTHORIZATION: Flood Control Act of 1968.

REMAINING BENEFIT-REMAINING COST RATIO: 2.8 to 1 at 3 1/4 percent.

TOTAL BENEFIT-COST RATIO: 2.1 to 1 at 3 1/4 percent

INITIAL BENEFIT-COST RATIO: 3.1 to 1 at 3 1/4 percent (FY 1985).

BASIS OF BENEFIT-COST RATIO: Benefits are based on evaluation made in General Design Memorandum, approved October 1982, and updated by Design Memorandum 2 approved 3 September 1986, with October 1986 price levels. Costs have been updated to 1 October 1994 price levels.

SUMMARIZED FINANCIAL DATA			ACCUM. PCT. OF EST. FED. COST	STATUS: (1 Jan 1995)	PERCENT COMPLETE	PHYSICAL COMPLETION SCHEDULE
Estimated Federal Cost (CofE)		$ 68,550,000		Entire Project	48	Being Determined
Estimated Non-Federal Cost		52,550,000				
Cash Contributions	$ 6,050,000					
Other Costs	46,500,000					
Total Estimated Project Cost		$121,100,000				

Allocations to 30 September 1994	$13,985,000	
Conference Allowance for FY 1995	1,500,000	
Allocation for FY 1995	1,213,000 1/	
Allocations through FY 1995	15,198,000 2/	22
Allocations Requested for FY 1996	0	22
Programmed Balance to Complete after FY 1996	53,352,000	
Unprogrammed Balance to Complete after FY 1996	0	

PHYSICAL DATA

Channels: 15.3 miles above Clear Lake
Second Outlet: gated outlet structure and channel from Clear Lake to Galveston Bay
Relocations:
Railroads: Alterations to three bridges ($3,643,000)

1/ Reflects $237,000 reduction assigned as savings and slippage.
2/ Reflects $1,596,000 programmed carryover into FY 1996.

JUSTIFICATION: The project would provide flood protection for a rapidly developing residential and commercial area, a suburb of Houston. Value of land and improvements that would be protected from the design flood is estimated at $530,000,000 based on 1990 price levels. Flooding in June 1976 caused minor damages; however, development in the area has continued and more runoff and damages would occur under current conditions. In July 1979, major flooding occurred and approximately $49,500,000 in damages were experienced based on October 1994 price levels. The average annual benefits are $8,128,600, all flood control included in Design Memorandum 2, approved 3 September 1986, based on 1 October 1986 price levels.

FISCAL YEAR 1996: The total program amount, including the requested and programmed carryover amounts of $0 and $1,596,000, respectively, with an unobligated carryover of $1,296,000 into FY 1997 will be applied as follows:

Continue Cultural Resources Investigations	$ 50,000
Federal Review (Real Estate)	50,000
Planning, Engineering, and Design	200,000
Total	$ 300,000

NON-FEDERAL COST: In accordance with the cost sharing and financing concepts reflected in the Water Resources Development Act of 1986, the non-Federal sponsors must comply with the requirements listed below.

Requirements of Local Cooperation	**Payments During Construction and Reimbursements**	**Annual Operation, Maintenance, Repair Rehabilitation, and Replacement Cost**
Provide lands, easements, rights-of-way and dredged and excavated material disposal areas.	$22,934,000	
Modify or relocate utilities, roads, bridges (except railroad bridges), and other facilities, where necessary for the construction of the project.	23,566,000	
Pay 5 percent of the separable costs allocated for mitigation measures.	250,000	
Pay 5 percent of the costs allocated to flood control, and bear all costs of operation, maintenance, repair, rehabilitation and replacement of flood control facilities.	5,800,000	$430,000
Total Non-Federal Costs	$52,550,000	$430,000

The non-Federal sponsors have also agreed to make all required payments concurrently with project construction.

STATUS OF LOCAL COOPERATION: The sponsors are Galveston and Harris Counties. On 30 June 1986, the sponsors entered into a Local Cooperation Agreement to provide the necessary local cooperation.

The current non-Federal cost estimate of $52,550,000, which includes a cash contribution of $6,050,000, is an increase of $18,761,000 over the non-Federal cost estimate of $33,789,000 in the Local Cooperation Agreement, which included a cash contribution of $4,789,000. Analysis of the non-Federal sponsor's financial capability to participate in the project affirms that the sponsors have a reasonable and implementable plan for meeting their financial commitment.

COMPARISON OF FEDERAL COST ESTIMATES: The current Federal cost estimate of $68,550,000 is an increase of $550,000 from the latest estimate ($68,000,000) submitted to Congress (FY 1995). This change includes the following items.

Item	**Amount**
Price Escalation on Construction Features	$ 550,000
Total	$ 550,000

STATUS OF ENVIRONMENTAL IMPACT STATEMENT: The final Environmental Impact Statement was filed with the Environmental Protection Agency August 1982.

OTHER INFORMATION: Funds to initiate preconstruction planning were appropriated in Fiscal Year 1972. Funds to initiate construction were appropriated by the Fiscal Year 1985 Supplemental Appropriations Act.

By letter 20 February 1986, Brazoria County Drainage District No. 4 requested that the portion of the project lying upstream of the Brazoria-Galveston County line, river mile 19.1, be placed in the "inactive" category. Reclassification was approved 27 May 1986.

The total cost of fish and wildlife mitigation is estimated to be $5,000,000 (Federal $4,750,000 and non-Federal $250,000).

APPROPRIATION TITLE: Construction, General - Local Protection (Flood Control)

PROJECT: El Paso, Texas (Continuing)

LOCATION: The project is located in El Paso, El Paso County, Texas

DESCRIPTION: The project consists of a single-purpose flood control system of detention dams, diversion dikes, conduits, and channels to collect, regulate and discharge runoff into the Rio Grande.

AUTHORIZATION: Flood Control Act of 1965.

REMAINING BENEFIT - REMAINING COST RATIO: 6.5 to 1 at 3 1/4 percent.

TOTAL BENEFIT - COST RATIO: 2.0 to 1 at 3 1/4 percent.

INITIAL BENEFIT - COST RATIO: 1.5 to 1 at 3 1/4 percent (FY 1970).

BASIS OF BENEFIT - COST RATIO: Benefits are from the General Design Memorandum approved in September 1987 at October 1987 price levels.

SUMMARIZED FINANCIAL DATA			**ACCUM. PCT. OF EST. FED. COST**
Estimated Federal Cost		$113,400,000	
Estimated Non-Federal Cost		37,600,000	
Cash Contribution	$ 3,900,000		
Other Costs	33,700,000		
Total Estimated Project Cost		$151,000,000	
Allocations to 30 September 1994		$ 85,686,000	
Conference Allowance for FY 1995		4,500,000	
Allocation for FY 1995		3,788,000 1/	
Allocations through FY 1995		89,474,000 2/	79

STATUS (1 JAN 1995)	**PERCENT COMPLETE**	**PHYSICAL COMPLETION SCHEDULE**
Entire Project	76	Being Determined

PHYSICAL DATA

Central Area:	Northwest Area:
Dams - 6	Dams - 5
Channels - 34,900 ft.	Channels - 21,000 ft.
Conduits - 25,900 ft.	Conduits - 13,700 ft.
Southeast Area:	
Dams - 4	Detention Basins:
Channels - 26,000 ft.	Chevron
	Phelps Dodge
	Lomaland
	Americas

1/ Reflects $712,000 reduction assigned as savings and slippage.
2/ Reflects $4,933,000 in programmed carryover into FY 1996.

SUMMARIZED FINANCIAL DATA (Continued)		ACCUM. PCT. OF EST. FED. COST
Allocation Requested for FY 1996	$ 400,000	79
Programmed Balance to Complete after FY 1996	23,526,000	
Unprogrammed Balance to Complete after FY 1996	0	

JUSTIFICATION: Project provides flood protection for urban areas subject to damaging floods from arroyos on the slopes of the adjacent mountains. Major damaging floods occurred in 1950, 1955, 1958, 1962, 1963, 1966, 1967, 1968, and 1974. The flood of record occurred in 1958 and caused estimated damages of $984,000. Recurrence of this flood based on October 1994 prices would cause damages estimated at $6,950,000. Standard Project Flood is the design flood for the Central and Northwest Areas. The National Economic Development Plan has been selected for the Southeast Area. Estimated urban acres protected by the authorized project are 8,830. Value of land and improvements in the Standard Project Flood Plain is about $2.56 billion (October 1994 prices). Average annual benefits are $10,873,000, all flood control, based on October 1987 price levels.

FISCAL YEAR 1996: The total program amount, including the requested and programmed carryover amounts of $400,000 and $4,933,000 respectively, will be applied as follows:

Initiate Lomaland System	$ 300,000
Continue Bluff Channel Phase III	4,500,000
Planning, Engineering and Design	213,000
Construction Management	320,000
Total	$ 5,333,000

NON-FEDERAL COST: In accordance with the cost sharing and financing concepts reflected in the Water Resources Development Act of 1986, the non-Federal sponsor must comply with the requirements listed below.

Requirements of Local Cooperation	**Payments During Construction and Reimbursement**	**Annual Operation, Maintenance, Repair, Rehabilitation and Replacement Costs**
Central and Northwest Areas:		
Provide lands, easements, rights of way, and borrow and excavated or dredged material disposal areas.	$10,740,000	
Modify or relocate utilities, roads, bridges (except railroad bridges), and other facilities, where necessary for the construction of the project.	2,560,000	
Bear all costs of operation, maintenance, repair, rehabilitation, and replacement of flood control facilities.	0	$490,000
Total Non-Federal Costs (Central and Northwest Areas)	$13,300,000	$490,000
Southeast Area:		
Provide lands, easements, rights of way, and borrow and excavated or dredged material disposal areas.	$19,960,000	
Modify or relocate utilities, roads, bridges (except railroad bridges), and other facilities, where necessary for the construction of the project.	440,000	
Pay 5 percent of the costs allocated to flood control to bring the total non-Federal share of flood control costs to 25 percent, and bear all costs of operation, maintenance, repair, rehabilitation and replacement of flood control facilities.	3,900,000	$ 78,000
Total Non-Federal Costs (Southeast Area)	$24,300,000	$ 78,000
Total Non-Federal Costs (Southeast, Central and Northwest Areas)	$37,600,000	$568,000

STATUS OF LOCAL COOPERATION: The project sponsor, the city of El Paso, executed a Section 221 agreement on 31 August 1972 which was approved by the Secretary of the Army on 7 September 1972. The city of El Paso is acquiring rights-of-way for each item of construction as required.

The Local Cooperation Agreement for construction in the Southeast Area was executed with the city of El Paso, Texas, in September 1988. The current non-Federal cost estimate of $24,300,000, for the southeast area, which includes a cash contribution of $3,900,000 is an increase of $2,600,000 from the non-Federal cost estimate of $21,700,000 noted in the Local Cooperation Agreement, which included a cash contribution of $3,700,000. In the Local Cooperation Agreement, the non-Federal Sponsor indicated that it is financially capable and willing to contribute the non-Federal share. Our analysis of the non-Federal Sponsor's financial capability to participate in the project affirms that the sponsor has a reasonable and implementable plan for meeting its financial commitment. By letter dated 14 March 1989, the city of El Paso agreed to sponsor the project construction for Pershing Dam Safety Modification. As local sponsor the City participated in the project construction in accordance with the existing 221 Agreement as modified by P.L. 99-662. No land acquisition was required to perform the modification to the dam.

COMPARISON OF FEDERAL COST ESTIMATES: The current Federal cost estimate of $113,400,000 is an increase of $600,000 from the latest estimate ($112,800,000) presented to Congress (FY 1995). This change includes the following items.

Item	**Amount**
Price Escalation on Construction Features	$600,000
Total	$600,000

STATUS OF ENVIRONMENTAL IMPACT STATEMENT: The final Environmental Impact Statement for the Central Area was filed with the Council on Environmental Quality in November 1970. The final Environmental Impact Statement for the Northwest Area was submitted to the Council on Environmental Quality in November 1977. The final Environmental Impact Statement for the Southeast Area was filed with the Environmental Protection Agency in November 1987.

OTHER INFORMATION: Funds to initiate engineering and design were appropriated in Fiscal Year 1967, and for construction in Fiscal Year 1970. Funds to initiate construction of the Southeast Area were appropriated in Fiscal Year 1988.

APPROPRIATION TITLE: Construction, General - Local Protection (Flood Control)

PROJECT: McGrath Creek, Wichita Falls, Texas (Continuing)

LOCATION: The project is located in the northern central portion of Texas, in the city of Wichita Falls.

DESCRIPTION: The project consists of a new spillway at Sikes Lake and a 0.7-mile concrete lined channel along McGrath Creek between Sikes Lake and the confluence with Holliday Creek.

AUTHORIZATION: Water Resources Development Act of 1988.

REMAINING BENEFIT-REMAINING COST RATIO: 1.3 to 1 at 8 1/2 percent.

TOTAL BENEFIT-COST RATIO: 1.3 to 1 at 8 1/2 percent.

INITIAL BENEFIT TO COST RATIO: 1.3 to 1 at 8 1/2 percent (FY 1994).

BASIS OF BENEFIT-COST RATIO: Economic reevaluation completed in May 1992 at October 1992 price levels.

SUMMARIZED FINANCIAL DATA			ACCUM. PCT. OF EST. FED. COST	STATUS (1 Jan 1995)	PERCENT COMPLETE	PHYSICAL COMPLETION SCHEDULE
Estimated Federal Cost		$ 7,270,000		Entire Project	0	Being Determined
Estimated Non-Federal cost		4,030,000				
Cash Contribution	$ 570,000					
Other Costs	3,460,000					
Total Estimated Project Cost		$ 11,300,000				
Allocations to 30 September 1994		1,386,000				
Conference Allowance for FY 1995		1,700,000				
Allocation for FY 1995		1,431,000 1/				
Allocations through FY 1995		2,817,000 2/	39			
Allocation Requested for FY 1996		110,000	40			

PHYSICAL DATA

Channel:
Length - 0.7 mile
Bottom Width - 12 ft.

Spillway: Side discharge ogee weir
Design discharge - 6010 cfs

1/ Reflects $269,000 reduction assigned as savings and slippage.
2/ Reflects $1,417,000 in programmed carryover into FY 1996.

Division: Southwestern **District: Tulsa** **Project: McGrath Creek, Wichita Falls, Texas**

6 February 1995

SUMMARIZED FINANCIAL DATA (Continued)

Programmed Balance to Complete after FY 1996	4,343,000
Unprogrammed Balance to Complete after FY 1996	0

JUSTIFICATION: The project will provide protection from periodic floods which have inundated the city numerous times in past years during periods of heavy spring and summer rains and storms. The flood of record occurred in May 1982 and caused damages estimated at $32,474,000 using 1 October 1994 price levels. The project would provide protection from the 100-year flood. Average annual benefits are $1,211,000, all flood control, based on October 1992 price levels.

FISCAL YEAR 1996: The total program amount, including the requested and programmed carryover amounts of $110,000 and $1,417,000, respectively, will be applied as follows:

Initiate construction	$1,462,000
Planning Engineering & Design	48,000
Construction Management	17,000
Total	$1,527,000

NON-FEDERAL COST: In accordance with the cost sharing and financing concepts reflected in Water Resources Act of 1986, the non-Federal sponsor must comply with the requirements listed below.

Requirements of Local Cooperation	**Payments During Construction**	**Annual Operation, Maintenance, Repair, Rehabilitation, and Replacement Cost**
rovide lands, easements, rights-of-way and dredged material disposal areas.	$ 670,000	
odify or relocate utilities, roads, bridges (except railroad bridges), and other facilities, where necessary for the construction of the project.	2,790,000	
ay five percent of the costs allocated to flood control and bear all cost of operation, maintenance, repair, rehabilitation and replacement of flood control facilities.	570,000	13,800
Total Non-Federal Costs	$4,030,000	$13,800

The non-Federal sponsor has also agreed to make all required payments concurrently with project construction.

STATUS OF LOCAL COOPERATION: The Project Cooperation Agreement (PCA) was executed 21 November 1994.

COMPARISON OF FEDERAL COST ESTIMATES: The current Federal cost estimate of $7,270,000 is an increase of $370,000 from the estimate ($6,900,000) as last presented to Congress (FY 1994). This change includes the following items:

Item	Amount
Price Escalation on Construction Features	$340,000
Other Estimating Adjustments	30,000
Total	$370,000

STATUS OF ENVIRONMENTAL IMPACT STATEMENT: The final Environmental Impact Statement was filed with the Environmental Protection Agency on 22 January 1988.

OTHER INFORMATION: Funds to initiate preconstruction engineering and design were appropriated in Fiscal Year 1990 and funds to initiate construction were appropriated in Fiscal Year 1994. Authorization of the project, as set forth in the Water Resources Development Act of 1988, provides that 3.3 acres of project land be planted with trees and shrubs for mitigation of fish and wildlife losses. The total estimated cost for mitigation is $93,000. No additional land is required.

APPROPRIATION TITLE: Construction, General - Local Protection (Flood Control)

PROJECT: San Antonio Channel Improvement, Texas (Continuing)

LOCATION: The project is located in the city of San Antonio, Bexar County, Texas.

DESCRIPTION: The project includes local protection features including channels, levees and two diversion tunnels.

AUTHORIZATION: Flood Control Act of 1954 and the Water Resources Development Act of 1976.

REMAINING BENEFIT-REMAINING COST RATIO: 13.8 to 1 at 2-1/2 percent.

TOTAL BENEFIT-COST RATIO: 2.6 to 1 at 2-1/2 percent.

INITIAL BENEFIT-COST RATIO: 1.3 to 1 at 2-1/2 percent (FY 1957).

BASIS OF BENEFIT-COST RATIO: Benefits are from the latest available evaluation approved in May 1987 at 1987 price levels.

SUMMARIZED FINANCIAL DATA			**ACCUM. PCT. OF EST. FED. COST**	**STATUS (1 Jan 1995)**	**PERCENT COMPLETE**	**PHYSICAL COMPLETION SCHEDULE**
Estimated Federal Cost		$145,300,000		Entire Project	95	Oct 1996
Estimated Non-Federal Cost		65,200,000				
Cash Contributions	$ 3,800,000					
Other Costs	61,400,000					
Total Estimated Project Cost		$210,500,000				
Allocations to 30 September 1994		132,503,000				
Conference Allowance for FY 1995		6,000,000				
Allocation for FY 1995		5,700,000 1/				
Allocations through FY 1995		138,203,000	95			

PHYSICAL DATA

Channels: 30.7 miles
Concrete drop structure: one
Relocations:
  Railroad: alteration to 11 bridges ($560,000)
Tunnels:
  San Pedro Creek, 6,040 feet in length
  San Antonio River, 16,360 feet in length

1/ Reflects $950,000 reduction assigned as savings and slippage, and $650,000 reprogrammed to the project.

Division: Southwestern **District: Fort Worth** **Project: San Antonio Channel Improvement, Texas**

SUMMARIZED FINANCIAL DATA (Continued)		ACCUM. PCT. OF EST. FED. COST
Allocation Requested for FY 1996	7,097,000	100
Programmed Balance to Complete after FY 1996	0	
Unprogrammed Balance to Complete after FY 1996	0	

JUSTIFICATION: The improvements will provide a high degree of protection to the metropolitan area of San Antonio which has been subject to disastrous floods and heavy loss of life in the past. Approximately 3,085 acres of urban lands are subject to flooding in San Antonio. Value of land and improvements that would be protected from the design flood is estimated at $1,011,000,000 based on 1994 price levels. The maximum flood of record occurred in September 1921 causing $949,000 in damages and affected areas totaling 2,900 acres. A recurrence of this flood under current conditions and October 1994 price levels would result in damages estimated at $68,149,000 of which $66,643,000 would be prevented with the project in full operation. The last major flood occurred in August 1992 during which $11,300,000 in damages were prevented by completed portions of the project. The estimated average annual benefits, based on October 1987 price levels, are as follows:

Annual Benefits	**Amount**
Flood Control	$ 13,466,000
Land Enhancement	915,000
Total	$ 14,381,000

FISCAL YEAR 1996: The requested amount will be applied as follows:

Complete Construction of Tunnels Phase IV - Outlet	$ 2,809,000
Complete Construction of Trash Racks	700,000
Complete Construction of Unit 7-3-2, San Pedro	1,715,000
Complete Construction of Tunnels Phase IV - Intake	1,144,000
Planning, Engineering and Design	84,000
Construction Management	645,000
Total	$ 7,097,000

NON-FEDERAL COST: In accordance with the authorizing act, Flood Control Act of 1954, the non-Federal sponsor must comply with the requirements listed below:

Requirements of Local Cooperation	**Payments During Construction and Reimbursements**	**Annual Operation, Maintenance, Repair Rehabilitation, and Replacement Costs**
Provide lands, relocation payments, and assistance to displaced persons.	$ 16,541,000	
Modify and relocate/reconstruct channel dams, bridges and utilities.	32,861,000	
Channel rectification.	11,998,000	
Pay 2.65 percent of Federal construction costs, based on land enhancement benefits, and bear all costs of operation, maintenance and replacement of flood control facilities.	3,800,000	$ 884,000
Total Non-Federal Costs	$ 65,200,000	$ 884,000

The Non-Federal Sponsor has also agreed to make all required payments concurrently with project construction.

STATUS OF LOCAL COOPERATION: The San Antonio River Authority, a State agency, by an ordinance passed on 28 February 1956, agreed to comply with all the requirements of local cooperation. This was supplemented by and agreement dated 14 January 1972, which addressed the authorizing requirements of Public Law 91-646. Under a contract of 12 September 1955, the Authority was authorized to expend $12,000,000 on capital improvements; however, due to continuous increase in cost of construction and relocations, added channel improvement below Bergs Mill, increased land values, and local interests costs required by the Uniform Relocations Assistance and Real Property Acquisition Policies Act of 1970, the Authority estimates $65,200,000 will now be required. Cash contributions in the amount of $3,511,000 have been received from the Authority through September 1994 in compliance with requirements of the Flood Control Act of 1954. Rights-of-way have been furnished as required for construction performed to date. Thus far, local interests have expended approximately $65,000,000 for lands, required modifications of utilities and bridges, channel rectification, relocation/reconstruction of channel dams, payments required for relocation assistance, and required cash contributions.

STATUS OF LOCAL COOPERATION (continued):

In addition, local interests have incurred operations and maintenance costs of $4,555,000 for reconstruction of Olmos Dam in the late 1970's and early 1980's when it was determined that the existing dam was in danger of overturning in certain flooding conditions. Olmos Dam is a flood control detention reservoir with no permanent storage. It was constructed during 1925-26 at a cost of approximately $1,575,000. The dam will continue to operate in conjunction with the San Antonio Channel Improvement project.

COMPARISON OF FEDERAL COST ESTIMATES: The current Federal cost estimate of $145,300,000 is an increase of $700,000 over the latest estimate ($144,600,000) submitted to Congress (FY 1995). This change includes the following items:

Item	**Amount**
Price Escalation on Construction Features	$ 177,000
Post Contract Award and Other Estimating Adjustments (Including Contingency Adjustments)	523,000
Total	$ 700,000

STATUS OF ENVIRONMENTAL IMPACT STATEMENT: The final Environmental Impact Statement was filed with the Council on Environmental Quality on 9 November 1971. The final Supplemental Environmental Impact Statement for Unit 8-3-2 was filed with the Environmental Protection Agency on 13 February 1981. An Environmental Assessment for the tunnels on Units 8-4, 8-5-1, and 7-3-1 resulted in a Finding Of No Significant Impact which was signed by the District Engineer 20 May 1986. The Environmental Assessment is being updated to reflect the addition of some channelization at the San Antonio River Tunnel Outlet and is scheduled to be completed in February 1995. Also, an Environmental Assessment for San Pedro Creek Unit 7-3-2 resulting in a Finding of No Significant Impact was signed by the District Engineer on 13 August 1993.

OTHER INFORMATION: Funds to initiate preconstruction planning were appropriated in Fiscal Year 1956 and for construction in Fiscal Year 1957. The scheduled completion date of October 1996 for programmed work is a slippage from the latest completion date of June 1996 presented to Congress (FY 1995). This change is due to an adjustment in construction of San Pedro Creek, Unit 7-3-2, which is being constructed by the San Antonio River Authority under a Section 215 agreement with the Corps of Engineers. Additional time was required to remove hazardous waste from the construction site.

APPROPRIATION TITLE: Construction General - Local Protection (Flood Control)

PROJECT: Sims Bayou, Houston, TX (Continuing)

LOCATION: The project is located in Harris County, in the southern portion of Houston, Texas.

DESCRIPTION: The project provides flood damage reduction and consists of 19.3 miles of channel enlargement, rectification, and erosion control measures. Environmental quality measures, riparian habitat improvements, and recreational features are also included in the project.

AUTHORIZATION: Water Resources Development Act (WRDA) of 1986, WRDA of 1990, and WRDA of 1992.

REMAINING BENEFIT-REMAINING COST RATIO: 9.6 to 1 at 8 5/8 percent.

TOTAL BENEFIT-COST RATIO: 6.8 to 1 at 8 5/8 percent.

INITIAL BENEFIT-COST RATIO: 9.3 to 1 at 8 5/8 percent (FY 1990).

BASIS OF BENEFIT-COST RATIO: Benefits are from Supplement 1 to the General Design Memorandum dated May 1993 at October 1992 price levels. Costs are based on the GDM Supplement 1 at October 1992 price levels and are updated to October 1994 price levels.

SUMMARIZED FINANCIAL DATA			ACCUM. PCT. OF EST. FED. COST	STATUS (1 Jan 1995)	PERCENT COMPLETE	PHYSICAL COMPLETION SCHEDULE
Estimated Federal Cost		$212,700,000		Entire Project	19	Being Determined
Estimated Non-Federal Cost		96,700,000				
Cash Contribution	$18,100,000					
Other Costs	78,600,000					
Total Estimated Project Cost		$309,400,000				
Allocations to 30 September 1994		$ 17,399,000				
Conference Allowance for FY 1995		15,100,000				
Allocation for FY 1995		12,710,000 1/				
Allocations through FY 1995		30,109,000 2/	14			
Allocation Requested for FY 1996		12,000,000	19			
Programmed Balance to Complete after FY 1996		172,591,000				
Unprogrammed Balance to Complete after FY 1996		0				

PHYSICAL DATA

Channels:
  Sims Bayou - 19.3 miles
Relocations:
  Railroad bridges
  Utilities
  Roads
Recreation facilities
  Hike-and-bike trails
  with picnic and other day-use facilities

1/ Reflects $2,390,000 reduction assigned as savings and slippage.
2/ Reflects $5,181,000 programmed carryover into FY 1996.

Division: **Southwestern** **District:** **Galveston** **Project:** **Sims Bayou, Houston, Texas**

6 February 1995

JUSTIFICATION: The project will eliminate stream flooding from 14,800 acres of urban lands and beneficially affect nearly 78,000 persons living in 29,000 homes. The 100-year flood plain would be reduced to 2,300 acres outside the required rights-of-way. The recreational development will partially satisfy existing demand in the area. Average annual benefits, annualized at an 8-5/8% interest rate and based on October 1992 prices are as follows:

Annual Benefits	**Amount**
Flood Damage Prevention	$219,344,700
Recreation	945,300
Total	$220,290,000

FISCAL YEAR 1996: The total program amount, including the requested and programmed carryover amounts of $12,000,000 and $5,181,000, respectively, will be applied as follows:

Initiate channel rectification - Hemingway to Mykawa	$ 1,495,000
Initiate Union Pacific Railroad bridge relocation	432,000
Continue channel rectification - Reveille to Hemingway	7,338,000
Continue channel rectification - Mouth to Port Terminal Railroad	3,418,000
Complete I-45 to Reveille	953,000
Federal Review of Land Acquisitions	500,000
Planning, Engineering, and Design	438,000
Construction Management	607,000
Reimbursement to Local Sponsor	2,000,000
Total	$17,181,000

NON-FEDERAL COST: In accordance with the cost sharing and financing concepts reflected in the Water Resources Development Act of 1986, the non-Federal sponsor must comply with the requirements listed below:

Requirements of Local Cooperation	Payments During Construction and Reimbursements	Annual Operation, Maintenance, Repair, Rehabilitation, and Replacement Costs
Provide lands, easements, rights-of-way, and borrow and excavated or dredged material disposal areas.	$36,000,000	
Modify or relocate, utilities, roads, bridges (except railroad bridges), and other facilities, where necessary for the construction of the project.	42,323,000	
Pay one-half of the separable costs allocated to recreation and bear all cost of operation, maintenance, repair, rehabilitation and replacement of recreation facilities.	2,900,000	$139,000
Pay 5 percent of the costs allocated to flood control, and bear all costs of operation, maintenance, repair, rehabilitation and replacement of flood control facilities.	15,200,000	331,000
Credit for future preparation of the dredged material disposal area for the Mouth to PTRR reach and completed miscellaneous engineering and design activities.	277,000	
Total Non-Federal Costs	$96,700,000	$470,000

The non-Federal sponsors must also agree to make all required payments concurrently with project construction.

STATUS OF LOCAL COOPERATION: The sponsor for the flood control project is Harris County. The current non-Federal cost estimate of $93,800,000 for flood control, which includes a cash contribution of $15,200,000, is an increase of $7,200,000 from the non-Federal cost estimate of $86,600,000 noted in the Local Cooperation Agreement (LCA), which reflected a cash contribution of $13,800,000. In a letter dated 19 September 1991, the non-Federal sponsor indicated that it is financially capable and willing to contribute the increased non-Federal share. Our analysis (dated 31 October 1991) of the non-Federal sponsor's financial capability to participate in the project reaffirms that the sponsor has a reasonable and implementable plan for meeting their financial commitment as expressed in the LCA. The City of Houston has indicated its desire to sponsor the recreation features for the project. The Project Cooperation Agreement (PCA) with the city for recreation is pending updating the proposed recreational features.

COMPARISON OF FEDERAL COST ESTIMATES: The current Federal cost estimate of $212,700,000 is a decrease of $8,290,000 from the latest estimate of $220,990,000 (FY 1995). This change includes the following items.

Item	Amount
Price Escalation on Construction Features	$ (-) 4,881,000
Post Contract Award and Other Estimating Adjustments	$ (-) 3,409,000
Total	$ (-) 8,290,000

STATUS OF ENVIRONMENTAL IMPACT STATEMENT: The final Environmental Impact Statement was filed with the Environmental Protection Agency in September 1983.

OTHER INFORMATION: Funds to initiate preconstruction planning were appropriated in Fiscal Year 1986 and funds to initiate construction were appropriated in Fiscal Year 1990.

The Assistant Secretary of the Army for Civil Works has approved the sponsor's request for credit for work performed by the local sponsor. This credit is currently estimated at $20,070,000, exclusive of lands and is being reimbursed during the period of construction. The project authorization was amended by the Energy and Water Development Appropriations Act of 1990 as the project cost estimate exceeded the maximum cost growth as described in Section 902 of the Water Resources Development Act of 1986. The authorization has been further modified by WRDA '92, Section 102 (66), to include, to the extent practicable, measures to improve environmental quality and riparian habitat.

APPROPRIATION TITLE: Construction, General - Reservoirs

PROJECT: Acequias Irrigation System, New Mexico (Continuing)

LOCATION: There are about one thousand recognized Acequias throughout the state of New Mexico. Most are located in north-central New Mexico in the counties of Mora, Rio Arriba, Santa Fe, San Miguel and Taos.

DESCRIPTION: Protect and restore river diversions and associated canals of up to 400 community acequia systems.

AUTHORIZATION: Water Resources Development Act of 1986.

REMAINING BENEFIT - REMAINING COST RATIO: Not applicable. 1/

TOTAL BENEFIT - COST RATIO: Not applicable. 1/

INITIAL BENEFIT - COST RATIO: Not applicable. 1/

BASIS OF BENEFIT - COST RATIO: Not applicable. 1/

SUMMARIZED FINANCIAL DATA				**ACCUM. PCT. OF EST. FED. COST**
Estimated Federal Cost		$63,900,000		
Estimated Non-Federal Cost		21,300,000		
Cash Contribution	$21,300,000			
Total Estimated Project Cost		$85,200,000		
Allocations to 30 September 1994		8,260,000		
Conference Allowance for FY 1995		2,500,000		
Allocation for FY 1995		2,104,000	2/	
Allocations through FY 1995		10,364,000	3/	16
Allocation Requested for FY 1996		120,000		16
Programmed Balance to Complete after FY 1996		53,416,000		
Unprogrammed Balance to Complete after FY 1996		0		

STATUS (1 Jan 1995)	**PERCENT COMPLETE**	**PHYSICAL COMPLETION SCHEDULE**
Diversion Structures		
Canals and Ditches	16	Being Determined

1/ Project was authorized without regard to economic analysis in accordance with Section 1113 of the Water Resources Development Act of 1986.

2/ Reflects reduction of $396,000 assigned as savings and slippage.

3/ Reflects $1,900,000 in programmed carryover into FY 1996.

Division: Southwestern **District: Albuquerque** **Project: Acequias Irrigation System, New Mexico**

JUSTIFICATION: The acequia community ditch systems provide irrigation water to about 160,000 acres on an estimated 12,000 farms. About seventy percent of the farms average less than twenty acres in size and are used for subsistence farming. Acequias have been in existence since the early Spanish Colonization period of the 17th and 18th centuries and represent one of the oldest forms of cooperative institutions in the U.S. They are an integral part of the culture and heritage of New Mexico. Justification for the project is based upon the historic and social significance the Acequias have for the local residents and the major role they play in the overall local economy. Flood damages to the acequia diversion dams and main delivery systems and subsequent interruption of water flow to the systems can have a devastating effect on the irrigators. At the most critical times for irrigation, high flood flows from spring snowmelt at the beginning of the irrigation season and from intense summer thunderstorms during the peak of irrigation cause structural damage or complete loss of ditch structures needed for delivering water to crops.

FISCAL YEAR 1996: The total program amount, including the requested and programmed carryover amount of $120,000 and $1,900,000, respectively, will be applied as follows:

Continue Rehabilitation of Acequias	$ 1,660,000
Planning, Engineering and Design	160,000
Construction Management	200,000
Total	$ 2,020,000

NON-FEDERAL COST: In accordance with the cost sharing and financing concepts reflected in the Water Resources Development Act of 1986, the non-Federal sponsor must comply with the requirements listed below:

Requirements of Local Cooperation	**Payments During Construction and Reimbursement**	**Annual Operation, Maintenance, Repair, Rehabilitation, and Replacement Costs**
Pay 25 percent of the costs of Acequias restoration.	$21,300,000	$ 0 1/
Total Non-Federal Cost	$21,300,000	$ 0 1/

The non-Federal sponsor has also agreed to make all required payments concurrently with project construction.

1/ Operation, maintenance, repair, rehabilitation and replacement costs historically are the responsibility of each acequia organization.

STATUS OF LOCAL COOPERATION: The local sponsor, the State of New Mexico, has enacted legislation whereby the State provides 17-1/2% of the project costs and low interest loans to the local Acequias for the remaining 7-1/2% of the non-Federal share. The State of New Mexico has appropriated, on an annual basis, the funds necessary to meet the requirements of local sponsorship. Local Cooperation Agreements have been signed for funds appropriated in Fiscal Year 1988, Fiscal Year 1989, and Fiscal Year 1990. The general Local Cooperation Agreement to cover all the Acequias within the State for remaining work after Fiscal Year 1990 was executed in June 1992. A supplement to this LCA will be executed each year, under the authority of the Division Commander.

COMPARISON OF FEDERAL COST ESTIMATES: The current Federal cost estimate of $63,900,000 is the same as the latest estimate ($63,900,000) presented to Congress (FY 1995).

STATUS OF ENVIRONMENTAL IMPACT STATEMENT: An Environmental Assessment is being prepared for each Acequia Restoration Project. A signed Finding of No Significant Impact will be filed with the Environmental Assessment, prior to the issuance of the Notice to Proceed to the contractor, if the restoration activities do not have a significant environmental effect.

OTHER INFORMATION: Funds to initiate preconstruction engineering and design were appropriated in Fiscal Year 1987. Funds to initiate construction were appropriated in Fiscal Year 1988. The authorizing legislation provides that the historical acequia systems of the Southwestern United States be considered as public entities if these systems are chartered by the respective State laws as political subdivisions of that state. The state of New Mexico is the local sponsor for all the Acequias projects within the State.

APPROPRIATION TITLE: Construction, General - Reservoirs (Flood Control)

PROJECT: Ray Roberts Lake, Texas (Continuing)

LOCATION: Ray Roberts Dam is located at river mile 60.0 on the Elm Fork of the Trinity River in Denton County, Texas and 30 miles upstream from the existing Lewisville Dam.

DESCRIPTION: The project is a multipurpose reservoir with an earthfill dam, recreational park areas and a greenbelt corridor along with Elm Fork connecting it to the upstream reaches of Lewisville Lake. The reservoir storage capacity is 1,064,600 acre-feet (260,800 flood control, 749,200 water supply and 54,600 sediment reserve).

AUTHORIZATION: River and Harbor Act of 1965 and Water Resources Development Act of 1990.

REMAINING BENEFIT-REMAINING COST RATIO: 6.9 to 1 at 3-1/4 percent.

TOTAL BENEFIT-COST RATIO: 2.1 to 1 at 3-1/4 percent.

INITIAL BENEFIT-COST RATIO: 2.4 to 1 at 3-1/4 percent (FY 1975).

BASIS OF BENEFIT-COST RATIO: Benefits are from the latest available evaluations approved in August 1980 at 1979 price levels for the reservoir project and approved 24 December 1987 at October 1984 price level for the Greenbelt Corridor.

SUMMARIZED FINANCIAL DATA				**ACCUM. PCT. OF EST. FED. COST**	**STATUS (1 Jan 1995)**	**PERCENT COMPLETE**	**PHYSICAL COMPLETION SCHEDULE**
Estimated Total Appropriation Requirement			$315,200,000		Entire Project	98	Jul 1997
Future Non-Federal Reimbursement			206,300,000				
Estimated Federal Cost (Ultimate)			108,900,000				
Estimated Non-Federal Cost			$206,300,000				
Reimbursements		$206,300,000					
Water Supply	$181,200,000						
Recreation	25,100,000						
Total Estimated Project Cost			$315,200,000				

SUMMARIZED FINANCIAL DATA (Continued)

		ACCUM. PCT. OF EST. FED. COST
Allocations to 30 September 1994	$304,472,000	
Conference Allowance for FY 1995	5,400,000	
Allocations for FY 1995	5,195,000 1/	
Allocations through FY 1995	309,667,000	99
Allocation Requested for FY 1996	3,500,000	99
Programmed Balance to Complete after FY 1996	2,033,000	
Unprogrammed Balance to Complete after FY 1996	0	

1/ Reflects $855,000 reduction assigned to savings and slippage, and $650,000 reprogrammed to the project.

PHYSICAL DATA

Dam

Type - Rolled earth
Height - 141 feet (max above streambed)
Length - 14,965 feet

Ray Roberts Lake Lands

Fee	- 47,000 acres
Flowage easements	- 2,302 acres
Total	49,302 acres

Spillway

Type - Uncontrolled Broadcrested
Length - 100 feet
Design Capacity (Max Pool)
- 14,500 cubic feet per second

Greenbelt Corridor Lands

Fee	- 1,100 acres
Conservation Easement	- 500 acres
Total	1,600 acres

Relocations

Roads	- 42.5 miles	($37,793,000)
Railroads	- 2.7 miles	($ 7,131,000)
Cemeteries, Utilities, and Structures -		($13,223,000)

Lewisville Lake Lands

Fee - 463 acres

Type - Predominantly agriculture
Improvement - Varied farm and ranch units

JUSTIFICATION: The project is an authorized element in the plan of improvement of the Trinity River Basin. Ray Roberts Lake permitted reallocation of flood control storage from Lewisville Lake in exchange for corresponding water supply (conservation) storage. The project will provide 74.3 million gallons per day for municipal and industrial water supply and satisfy recreation needs of 6,000,000 user days annually (includes increases due to Lewisville Modification). The estimated average annual benefits, based on October 1979 price levels are as follows:

Annual Benefits	**Amount**
Water Supply	$10,246,000
Recreation	7,052,000
Total	$17,298,000

FISCAL YEAR 1996: The requested amount will be applied as follows:

Initiate Greenbelt Construction	$ 700,000
Continue Land Acquisition	1,842,000
Complete Lewisville Fencing	95,000
Complete Embankment Seepage Control	243,000
Complete Rehabilitation of Vault Toilets	115,000
Complete Cultural Resource Mitigation	49,000
Complete Lewisville Project Office	190,000
Planning, Engineering and Design	61,000
Construction Management	205,000
Total	$ 3,500,000

NON-FEDERAL COST: In accordance with the authorizing acts, the Rivers and Harbors Act of 1965, and the Water Resources Development Act of 1990 the non-Federal sponsor must comply with the requirements listed below.

Requirements of Local Cooperation	Payments During Construction and Reimbursements	Annual Operation, Maintenance, Repair Rehabilitation and Replacement Costs
Pay all costs allocated to municipal and industrial water supply and bear all costs of operation, maintenance and replacement of municipal and industrial water supply facilities.	$181,200,000	$ 330,000
Pay one-half of the separable costs allocated to recreation and bear all costs of operation, maintenance and replacement of recreation facilities.	19,200,000	1,482,000
Pay sixty-two and one-half percent of the separable costs allocated to the Greenbelt Corridor recreation and bear all costs of operation, maintenance and replacement of recreation facilities.	5,900,000	75,000
Total Non-Federal Costs	$206,300,000	$1,887,000

The non-Federal sponsors, the cities of Dallas and Denton, have agreed to repay their share of the construction costs within a period of 50 years following completion of construction.

STATUS OF LOCAL COOPERATION: Water supply and recreation contracts with the cities of Dallas and Denton were approved by the Assistant Secretary of the Army on 16 September 1980. The recreation contracts with the cities of Dallas and Denton were modified to include cost sharing of the Greenbelt Corridor. The contracts were approved by the Assistant Secretary of the Army on 6 October 1993, and were signed by all parties on 1 June 1994.

COMPARISON OF FEDERAL COST ESTIMATES: The current Federal cost estimate of $315,200,000 is an increase of $4,000,000 from the latest estimate ($311,200,000) presented to Congress (FY 1995). This change includes the following items.

Item	**Amount**
Price Escalation on Construction Features	$(-)75,000
Post Contract Award and Other Estimating Adjustments (including contingency adjustments)	3,989,000
Price Escalation on Real Estate	86,000
Total	$4,000,000

STATUS OF ENVIRONMENTAL IMPACT STATEMENT: The final Environmental Impact Statement was filed with the Council on Environmental Quality on 4 March 1974. An updated supplement was filed on 18 September 1975.

OTHER INFORMATION: Funds to initiate preconstruction planning were appropriated in Fiscal Year 1970 and for initiation of construction in Fiscal Year 1975. Land acquisition was initiated in September 1980 and construction was initiated in September 1981. The Greenbelt Corridor between Ray Roberts Dam and Lewisville Lake was authorized by the Water Resource Development Act of 1990.

APPROPRIATION TITLE: Construction, General - Reservoirs (Flood Control)

PROJECT: Red River Basin Chloride Control, Texas and Oklahoma (Continuing)

LOCATION: The project is located in Cottle, Foard, Hall, and King Counties, Texas, and Harmon County, Oklahoma, along the Wichita and Red Rivers. Area VI is located on the Elm Fork of the Red River in Harmon County, Oklahoma; Area VII is located on the North Fork of the Wichita River, Cottle County, Texas; Crowell Brine Lake in Foard County Texas, is on Canal Creek, a tributary of the Pease River; Area VIII is located on the south fork of the Wichita River, King County, Texas; Area IX is on the Middle Pease River, Cottle County, Texas; Area X is on the Middle Fork of the Wichita River, King County, Texas; Areas XIII-XIV are on the Jonah and Salt Creeks of Prairie Dog Town Fork, of the Red River, Hall County, Texas.

DESCRIPTION: The purpose of the project is to improve water quality for municipal and industrial and agricultural water supply. The plan of improvement consists of one deep well injection system, three brine storage reservoirs, four low-flow brine collection dams, two well collection facilities, six pumping plants, and 56.3 miles of pipeline.

AUTHORIZATION: Section 203, Flood Control Act of 1966, Public Law 89-789, 7 November 1966, Arkansas-Red River Basins, TX, OK and KS, Part I.

Section 201, Flood Control Act of 1970, Public Law 91-611, 31 December 1970, Arkansas-Red River Basins Water Quality Control Study, TX, OK, and KS, Part II.

Section 74, Water Resources Development Act of 1974, Public Law 93-251, 7 March 1974.

Section 153, Water Resources Development Act of 1976, Public Law 94-587, 22 October 1976.

Section 1107, Water Resources Development Act of 1986, Public Law 99-662, 17 November 1986, General Design Phase I Plan Formulation, Volumes I and II (DM 25, November 1980).

REMAINING BENEFIT-REMAINING COST RATIO: 1.3 to 1 at 8-1/2 percent.

TOTAL BENEFIT-COST RATIO: 1.3 to 1 at 8-1/2 percent.

INITIAL BENEFIT-COST RATIO: 1.3 to 1 at 8-1/2 percent.

BASIS OF BENEFIT-COST RATIO: Benefits are from the Limited Reevaluation Report, approved 1 November 1993, at October 1992 price levels.

SUMMARIZED FINANCIAL DATA		ACCUM. PCT. OF EST. FED. COST	STATUS (1 Jan 1995)	PERCENT COMPLETE	PHYSICAL COMPLETION SCHEDULE
Estimated Federal Cost	$215,000,000		Entire Project	11	Being Determined
Estimated Non-Federal Cost	0				
Total Estimated Project Cost	$215,000,000				
Allocations to 30 September 1994	29,350,000				
Conference Allowance for FY 1995	16,000,000				
Allocation for FY 1995	13,468,000 1/				
Allocations through FY 1995	42,818,000 2/	20			
Allocation Requested for FY 1996	0	20			
Programmed Balance to Complete after FY 1996	172,182,000				
Unprogrammed Balance to Complete after FY 1996	0				

1/ Reflects $2,532,000 reduction assigned as savings and slippage.

2/ Reflects $14,375,000 programmed carryover into FY 1996.

JUSTIFICATION: Natural chloride pollution from salt springs, seeps and from flushouts of salt flats during floods, and man-made chloride pollution, limits the use of the water of Red River for municipal, industrial, and agricultural purposes. Area VI contributes about 510 tons per day; Area IX contributes about 340 tons per day; about 570 tons per day comes from Areas XIII and XIV. Source Areas VII, VIII and X in the Wichita River Basin contribute 430 tons per day to the natural chloride pollution. Control of chloride pollution in the Red River Basin could improve lake waters from poor quality 78 percent of the time to good quality 98 percent of the time, and the Red River below Fulton, Arkansas, would be usable all of the time. Water quality improvement in the Red River Basin as a result of the recommended plan would result in an additional 186,000 acres irrigated under optimal management conditions and cropping patterns. Demand for Red River water for municipal and industrial purposes is expected to be about 304 million gallons per day by the year 2042 with the project. The average annual benefits are $29,576,000 all water quality, based on October 1992 price levels.

Division: Southwestern **District: Tulsa** **Project: Red River Basin Chloride Control, Texas and Oklahoma**

FISCAL YEAR 1996: The total program amount, including the requested and programmed carryover amounts of $0 and $14,375,000, respectively, with an unobligated carryover of $9,286,000 into FY 1997, will be applied as follows:

Initiate Crowell Ground Water Monitoring	$ 40,000
Initiate Dam Area IX and VII	125,000
Initiate Roads Area IX	50,000
Initiate Pump Station Area VII, IX, X	250,000
Continue Land Acquisition Areas VI, VII and XIII-IV	124,000
Complete Crowell Gate City Electric	66,000
Complete Land Acquisition Area IX, X	391,000
Planning Engineering and Design	3,868,000
Construction Management	175,000
Total	$5,089,000

STATUS OF LOCAL COOPERATION: None is required. The Water Resources Development Act of 1986 authorized the project at full Federal expense. The Red River Authority of Texas has signed a 221 Agreement as the non-cost sharing non-Federal sponsor.

COMPARISON OF FEDERAL COST ESTIMATES: The Federal cost estimate of $215,000,000 is an increase of $5,000,000 from the estimate ($210,000,000) as last presented to Congress (FY 1995). This change includes the following items:

Item	**Amount**
Price Escalation Construction Features	$ 4,400,000
Post Contract Award and other Estimating Adjustments	600,000
Total	$ 5,000,000

STATUS OF ENVIRONMENTAL IMPACT STATEMENT: The Final Environmental Impact Statement was filed with the Environmental Protectional Agency on 18 May 1977. A Supplemental Final Environmental Impact Statement (SFEIS) is scheduled to be completed in February 1996. This is a delay of 16 months from Oct 94 as last presented to Congress. The delay is necessary to respond to the Draft Supplemental Fish and Wildlife Coordination Act Report (received 12 Aug 94), which states the intended opposition of the U. S. Fish and Wildlife Service as well as the Texas Parks and Wildlife Department and the Oklahoma Department of Wildlife Conservation. The state and Federal agencies have agreed to prepare an "Adaptive Management Plan" that would address both short and long term environmental concerns. That plan, to be included in the SFEIS, would provide for a comprehensive monitoring program and a plan of action to develop future mitigation measures if a need is identified. This approach will allow the project to move ahead to completion while providing assurances that the construction and operation of the project would remain environmentally compatible within the basin.

OTHER INFORMATION: Funds to initiate preconstruction engineering and design were appropriated in FY 1968 and funds to initiate construction were appropriated in FY 1991.

APPROPRIATION TITLE: Construction, General - Dam Safety Assurance

PROJECT: Tenkiller Ferry Lake, Oklahoma (Continuing)

LOCATION: The project is located on the Illinois River about 7 miles northeast of Gore and about 22 miles southeast of Muskogee, Oklahoma.

DESCRIPTION: The study area consists of the reservoir area above Tenkiller Ferry Dam up to the maximum pool caused by PMF inflow, the Illinois River floodplain from Tenkiller Ferry Dam to the Arkansas River, and the Arkansas River flood plain from Webbers Falls Lock and Dam to a point just below Fort Smith and Van Buren, Arkansas, including R. S. Kerr and W. D. Mayo reservoirs and navigation structures.

AUTHORIZATION: Flood Control Act of 1938.

BENEFIT-COST RATIO: Not applicable.

TOTAL BENEFIT-COST RATIO: Not applicable.

INITIAL BENEFIT-COST RATIO: Not applicable.

BASIS OF BENEFIT-COST RATIO: Not applicable.

SUMMARIZED FINANCIAL DATA			**ACCUM. PCT. OF EST. FED. COST**	**STATUS (1 Jan 1995)**	**PERCENT COMPLETE**	**PHYSICAL COMPLETION SCHEDULE**
Original Project				Entire Project	0	Being Determined
Actual Federal Cost		$ 24,057,718				
Actual Non-Federal Cost		0				
Cash Contributions	$ 0					
Other Costs	0					
Total Original Project Cost		$ 24,057,718				

SUMMARIZED FINANCIAL DATA (Continued):

Project Modification

			ACCUM. PCT. OF EST FED. COST
Estimated Federal Cost		$ 31,800,000	
Estimated Non-Federal cost		0	
Cash Contribution	$ 0		
Other Costs	0		
Total Estimated Modification Cost		$ 31,800,000	
Total Estimated Project Cost		$ 55,857,718	
Allocations to 30 September 1994		870,000	
Conference Allowance for FY 1995		0	
Allocation for FY 1995		0	
Allocations through FY 1995		870,000 **1/**	3
Allocation Requested for FY 1996		530,000	4
Scheduled Balance to Complete after FY 1996		30,400,000	
Unscheduled Balance to Complete after FY 1996		0	

1/ Reflects $264,000 in programmed carryover into FY 1996.

PHYSICAL DATA: Construction began in June 1947. Embankment closure was completed in May 1952. The dam consists of an earthfill embankment approximately 3,000 feet in length, an earthfill dike about 1,350 feet in length and with a gated concrete gravity spillway located on the right abutment. Ten tainter gates 50 feet wide by 24 feet high regulate lake releases through the spillway. The low flow control outlet is a 19-foot diameter conduit with two service gates. The top of dam is at elevation 677.2.

An auxiliary spillway with five 50 feet wide by 35 feet high tainter gates would be constructed near the right abutment of the embankment. This spillway structure would be designed similar to the existing spillway.

JUSTIFICATION: The spillway is inadequate to pass the probable maximum flood, and if it occurred, the embankment would be overtopped for a duration of 30 hours and a peak elevation of approximately 683.5 feet. The existing spillway would pass about 85% of the probable maximum flood with no freeboard. If the probable maximum flood occurred and overtopping caused dam failure, severe economic damage would be incurred downstream. The town of Gore is located about 7 miles downstream from the dam; however, the risk of loss of life would not be high as the town would be inundated by flood releases prior to dam failure because of the small downstream channel capacity.

FISCAL YEAR 1996: The total program amount, including the requested and programmed carryover amounts of $530,000 and $264,000, respectively, will be applied as follows:

Planning, Engineering and Design	$ 759,000
Supervision and Administration	35,000
Total	$ 794,000

NON-FEDERAL COST: Not applicable.

STATUS OF LOCAL COOPERATION: Not applicable.

COMPARISON OF FEDERAL COST ESTIMATES: The current Federal cost estimate of $31,800,000 has not been previously presented to Congress.

STATUS OF ENVIRONMENTAL IMPACT STATEMENT: Additional flowage easements may be required downstream of the reservoir because of the increased flood release capability. When plans are prepared for adding the recommended alternative a supplemental environmental impact statement will be prepared and filed with the Environmental Protection Agency.

The provisions of Section 404 of the Clean Water Act do not apply because the project improvements do not involve the placement of fill material or the discharge of dredge material in the waters of the United States.

OTHER INFORMATION: A feature design memorandum is underway and is scheduled for completion in the third quarter of Fiscal Year 1995. Plans and specifications will be initiated in Fiscal Year 1995 and are scheduled to complete in the fourth quarter of Fiscal Year 1996.

APPROPRIATION TITLE: Construction, General - Dam Safety Assurance

PROJECT: Sam Rayburn Dam and Reservoir, Texas (Dam Safety)

LOCATION: The existing Sam Rayburn Dam and Reservoir, Texas, is located on the Angelina River 25.2 miles upstream from its confluence with Neches River and about 10.0 miles northwest of Jasper, Texas.

DESCRIPTION: The Sam Rayburn Dam and Reservoir includes a main earthen embankment, two dikes, an uncontrolled broadcrested weir spillway, and a combination hydroelectric powerhouse and gated outlet works.

AUTHORIZATION: River and Harbor Act of 1945 (Existing Project).

REMAINING BENEFIT-REMAINING COST RATIO: Not applicable.

TOTAL BENEFIT-COST RATIO: Not applicable.

INITIAL BENEFIT-COST RATIO: Not applicable.

BASIS OF BENEFIT-COST RATIO: Not applicable.

SUMMARIZED FINANCIAL DATA

Original Project		
Actual Federal Cost		$ 65,700,000
Non-Federal Cost		3,000,000
Cash Contribution	$ 3,000,000	
Total Original Project Cost		$ 68,700,000

SUMMARIZED FINANCIAL DATA (CONTINUED)			ACCUM. PCT. OF EST. FED. COST	STATUS (1 Jan 1995)	PERCENT COMPLETE	PHYSICAL COMPLETION SCHEDULE
Spillway Modification						
Estimated Total Appropriation Requirement		$ 36,500,000		Entire Modification	30	Aug 1996
Future Non-Federal Reimbursement		1,360,000				
Hydropower	$ 960,000					
Cash Contributions	400,000					
Estimated Federal Cost (Ultimate)		$ 35,540,000				
Total Estimated Modification Cost		$ 36,900,000				
Total Estimated Project Cost		$105,600,000				
Allocations to 30 September 1994		$ 13,558,000				
Conference Allowance for FY 1995		16,000,000				
Allocation for FY 1995		13,468,000 1/				
Allocations through FY 1995		27,026,000	77			
Allocations Requested for FY 1996		9,474,000	100			
Programmed Balance to Complete after FY 1996		0				
Unprogrammed Balance to Complete after FY 1996		0				

1/ Reflects $2,532,000 reduction assigned to savings and slippage.

PHYSICAL DATA

Sam Rayburn Dam and Reservoir was started in September 1956 and deliberate impoundment began in March 1965. The rolled earthfill embankment is approximately 12,400 feet in length, with a crest width of 42 feet, a crest elevation of 190.0 feet National Geodetic Vertical Datum (NGVD), a maximum height of 120 feet, and a volume of about 6,000,000 cubic yards. The combination powerhouse and outlet works is a concrete structure approximately 166 feet wide, 240 feet long, with the lowest portion founded at elevation 30 feet NGVD. The uncontrolled spillway is 2,200 feet wide with a 15-foot wide concrete weir at a crest elevation of 176.0 feet NGVD. The modification of the spillway consists of constructing a new reinforced concrete weir, stilling basin and outfall channel at or near the existing spillway structure. The proposed weir would have a width of 640 feet, an overall length of 433 feet, an outfall channel approximately 5,000 feet long and a crest elevation of 176.0 feet NGVD.

Division: **Southwestern** **District:** **Fort Worth** **Project:** **Sam Rayburn Dam and Reservoir, Texas (Dam Safety)**

JUSTIFICATION: The uncontrolled spillway channel at Sam Rayburn Dam is constructed through erodible loose sand, shaley clay, and sandstone. Based on experience of significant erosion at other uncontrolled and unlined spillways constructed through less erodible material, the spillway at Sam Rayburn Dam would experience severe erosion damage and probably breach during passage of floods in excess of the 150-year flood frequency (25 percent of Probable Maximum Flood). Both experience and analysis indicate that a passage of the Probable Maximum Flood (PMF) would cause much more severe and extensive erosion damage to the spillway. This erosion would breach the existing concrete broadcrested control weir and would culminate in an uncontrolled catastrophic release of the reservoir.

FISCAL YEAR 1996: The requested amount will be applied as follows:

Complete Construction of Spillway Modification	$ 7,364,000
Planning, Engineering and Design	483,000
Construction Management	1,627,000
Total	$ 9,474,000

NON-FEDERAL COSTS: Sam Rayburn Dam Electric Cooperate (SRDEC), city of Lufkin, and Lower Neches Valley Authority (LNVA) have been notified by the Director of Civil Works by letter dated 23 October 1992 that cost sharing will be required of them. Cost sharing for SRDEC, Lufkin and LNVA will be in the amount of $960,000, $100,000 and $300,000 respectively.

STATUS OF LOCAL COOPERATION: A meeting was held on 13 November 1992 with the three non-Federal interests and representatives from Assistant Secretary of the Army, Civil Works; HQUSACE; Southwestern Division; and Fort Worth District to discuss the cost sharing of the project under the Section 1203(a) Dam Safety provisions of Water Resources Development Act of 1986. Sam Rayburn Dam Electric Cooperative, Lower Neches Valley Authority and the city of Lufkin have signed the Project Cooperation Agreement (PCA) and have final approval from Assistant Secretary, Army for Civil Works.

COMPARISON OF FEDERAL COST ESTIMATES: The current Federal cost estimate of $36,500,000 is an increase of $100,000 over the latest estimate ($36,400,000) submitted to Congress (FY 1995). This change includes the following items:

Item	Amount
Price Levels	$ 100,000
Total	$ 100,000

STATUS OF ENVIRONMENTAL IMPACT STATEMENT: Based upon the initial environmental assessment and the results of coordination, it has been concluded that the proposed action will not have a significant adverse effect on the human environment nor is it environmentally controversial. A Findings of No Significant Impact was signed 12 July 1991. It is recognized that an endangered species, the red cockaded woodpecker, as well as sensitive plants occur in the area. The current project design is the least cost alternative to minimize encroachment in these areas. Despite efforts to confine the spillway in the existing spillway area, the outfall channel will encroach on approximately 36 acres of National Forest Service land with approximately 11 acres requiring clearing. This required revision to the environmental assessment which was completed in September 1993. The project has been closely coordinated with the U. S. Fish and Wildlife and the National Forest Service. All National Environmental Policy Act requirements have been adhered to.

OTHER INFORMATION: Funds to initiate the Reevaluation Report were reprogrammed in Fiscal Year 1990 and funds to initiate construction were appropriated in Fiscal Year 1994.

APPROPRIATION TITLE: Construction, General - Dam Safety Assurance

PROJECT: Waco Lake, Texas (Dam Safety)

LOCATION: The existing Waco Lake is located on Bosque River, 4.6 miles above its confluence with Brazos River, at city of Waco, McLennan County, Texas.

DESCRIPTION: The Waco Lake includes a main earthen embankment, a gated concrete spillway, and an outlet works.

AUTHORIZATION: Flood Control Act of 3 September 1954 (Existing Project).

REMAINING BENEFIT-REMAINING COST RATIO: Not applicable.

TOTAL BENEFIT-COST RATIO: Not applicable.

INITIAL BENEFIT-COST RATIO: Not applicable.

BASIS OF BENEFIT-COST RATIO: Not applicable.

SUMMARIZED FINANCIAL DATA

Original Project		
Actual Federal Cost		$ 48,150,000
Non-Federal Cost		2,750,000
Cash Contribution	$ 250,000	
Other	2,500,000	
Total Original Project Cost		$ 50,900,000

SUMMARIZED FINANCIAL DATA (CONTINUED)

			ACCUM. PCT. OF EST. FED. COST	STATUS (1 Jan 1995)	PERCENT COMPLETE	PHYSICAL COMPLETION SCHEDULE
Spillway Modification						
Estimated Total Appropriation Requirement		$ 9,950,000		Entire Modification	0	Being Determined
Future Non-Federal Reimbursement		250,000				
Cash Contributions	250,000					
Estimated Federal Cost (Ultimate)		$ 9,950,000				
Total Estimated Modification Cost		$ 10,200,000				
Total Estimated Project Cost		$ 61,100,000				
Allocations to 30 September 1994		$ 0				
Conference Allowance for FY 1995		0				
Allocation for FY 1995		200,000 1/				
Allocations through FY 1995		200,000	2			
Allocations Requested for FY 1996		$ 300,000				
Programmed Balance to Complete after FY 1996		$ 9,450,000				
Unprogrammed Balance to Complete after FY 1996		0				

1/ Reflects $200,000 reprogrammed into the project.

PHYSICAL DATA

Waco Lake was started in June 1958 and deliberate impoundment began in February 1965. The rolled earthfill embankment is approximately 17,381 feet in length, excluding the spillway, with a crown width of 20 feet, a maximum height of 140 feet, top elevation is 510 feet National Geodetic Vertical Datum (NGVD), and a volume of about 16,000,000 cubic yards. The outlet works consists of an approach structure, an upstream gate control tower with a service bridge, a 20-foot diameter conduit, and a stilling basin. The spillway is a gated, ogee weir structure consisting a 120 feet of nonoverflow monoliths at each end and a 664-foot wide gated weir section. The weir crest is at elevation 465.0. The gated section has fourteen 40-foot wide by 35-foot high tainter gates each separated by an 8-foot thick pier. The piers also support a 13-foot wide service roadway which is a series of simple spans of concrete slab and triple prestressed concrete girder construction. The gate-controlled ogee weir spillway is 560 feet wide with 14 - 40 feet by 35 feet tainter gates at a crest elevation of 465.0 feet NGVD. The one gate-controlled conduit outlet works is 20 feet in diameter with three 6 feet 8 inches by 20 feet Broome-type tractor sluice gates and an invert elevation of 400 feet NGVD. The modification consists of raising the dam by 5.1 feet utilizing reinforced earth from the right spillway abutment to the right end of the dam and have a width equal to the crest

PHYSICAL DATA (continued):

width. The dam would be raised from the left spillway abutment to the left end of the dam with compacted fill. No major modification to the spillway, spillway service bridge, outlet works tower, and outlet works tower service bridge will be required. However, the spillway service bridge and hoist mechanisms for the tainter gates would also be raised.

JUSTIFICATION: The original hydrologic design criteria used for Waco Dam Spillway design has been revised. Current hydrologic design criteria indicates the spillway and outlet works cannot pass the PMF without overtopping the dam by 1.0 foot, which could lead to failure of the embankment and catastrophic release of the reservoir. Adding required freeboard, Waco Dam is hydrologically deficient by 5.1 feet.

FISCAL YEAR 1996: The requested amount will be applied as follows:

Planning, Engineering and Design	$	300,000
Total	$	300,000

NON-FEDERAL COSTS: Brazos River Authority and the city of Waco will cost share in the amount of $216,000 and $34,000 respectively.

STATUS OF LOCAL COOPERATION: The two project sponsors, Brazos River Authority, and the city of Waco, have been contacted to discuss the cost sharing of the project under the Section 1203(a) Dam Safety provisions of Water Resources Development Act of 1986. Both have informally acknowledged a willingness to share in the project cost.

COMPARISON OF FEDERAL COST ESTIMATES: The current Federal cost estimate of $9,950,000 has not been presented to Congress.

STATUS OF ENVIRONMENTAL IMPACT STATEMENT: An Environmental Assessment (EA) has been made of the proposed alternatives and a Draft Finding of No Significant Impact (FONSI) has been completed. None of the proposed alternatives would have any significant impact on the human environment if implemented; therefore, no Environmental Impact Statement will be prepared.

OTHER INFORMATION: Funds to initiate the Design Memorandum will be reprogrammed in Fiscal Year 1995. Fiscal Year 1996 funds will be used to complete the design memorandum and begin plans and specifications.

APPROPRIATION TITLE: Construction, General - Major Rehabilitation, Multiple Purpose (Including Power)

PROJECT: Dardanelle Lock and Dam, (Powerhouse) Arkansas (Major Rehabilitation) (Continuing)

LOCATION: Dardanelle Powerhouse is located at Dardanelle Lock & Dam on the Arkansas River in Yell County, Arkansas.

DESCRIPTION: Replace and uprate the four turbines and generators at the Dardanelle Powerhouse. The project is part of the McClellan-Kerr Arkansas River Navigation System.

AUTHORIZATION: River and Harbor Act of 1946.

REMAINING BENEFITS-REMAINING COST RATIO: 1.5 to 1 at 8 3/4 percent.

TOTAL BENEFIT-COST RATIO: 1.5 to 1 at 8 3/4 percent.

INITIAL BENEFIT-COST RATIO: 4.3 to 1 at 8 3/4 percent.

BASIS OF BENEFIT-COST RATIO: Benefits are from the revised draft Feature Design Memorandum, dated March 1993 at 1992 price levels.

SUMMARIZED FINANCIAL DATA				**ACCUM. PCT. OF EST. FED COST**
Estimated Total Appropriation Requirement			$29,700,000	
Future Non-Federal Reimbursement			29,700,000	
Estimated Federal Cost (Ultimate)			0	
Estimated Non-Federal Cost			29,700,000	
Cash Contributions		0		
Other Costs		0		
Reimbursements		$29,700,000		
Hydropower	$29,700,000			
Total Estimated Project Cost			$29,700,000	

STATUS (1 Jan 1995)	**PERCENT COMPLETE**	**PHYSICAL COMPLETION SCHEDULE**
Entire Project	3	Being Determined

PHYSICAL DATA

Replace existing four turbines with new turbines. Rewind the generators. This will result in a 19MW increase in rated total capacity from 142MW to 161MW.

SUMMARIZED FINANCIAL DATA (CONTINUED)

		ACCUM. PCT. OF EST. FED COST
Allocations to 30 September 1994	$1,640,000	
Conference Allowance for 1995	4,100,000	
Allocation for FY 1995	3,451,000 1/	
Allocation through FY 1995	5,091,000 2/	17
Allocation Requested for FY 1996	3,500,000	29
Programmed Balance to Complete after FY 1996	11,920,000	
Unprogrammed Balance to Complete after FY 1996	$ 9,189,000	

1/ Reflects $649,000 reduction for savings and slippage.

2/ Reflects $1,000,000 in programmed carryover into FY 1996.

JUSTIFICATION: Dardanelle powerhouse units are rapidly approaching failure and have exhibited reliability problems. Extensive repairs and/or replacement are required to maintain hydropower production. Uprating units with the replacements will allow for more efficient generation of power, increased benefits, and extend the useful life of this feature. This project will remove the existing four turbines and replace them with "state of the art" turbines and rewind the generators. This will increase power capacity at Dardanelle by 19MW (from 35.5MW each unit to 40.25MW each unit). Dardanelle Lake has two feet of peaking storage (65,000 acre-feet) for power. Average annual benefits are $4,780,000, all hydropower, based on 1992 price levels.

FISCAL YEAR 1996: The total program amount, including the requested and programmed carryover amounts of $3,500,000 and $1,000,000, respectively, will be applied as follows:

Continue Construction of Turbines and Generators	$3,960,000
Planning, Engineering, and Design	190,000
Construction Management	350,000
Total	$4,500,000

NON-FEDERAL COST: In accordance with the cost sharing and financing concepts reflected in the Flood Control Act of 1944, the non-Federal sponsor must comply with the requirements listed on the next page.

Requirements of Local Cooperation	Payments During Construction and Reimbursements	Annual Operation, Maintenance, Repair, Rehabilitation, and Replacement Costs
Pay all costs allocated to hydropower and bear all costs of operation, maintenance, repair, rehabilitation, and replacement of hydropower facilities.	$29,700,000	0
Cash Contribution	(0)	
Reimbursement	(29,700,000)	
Total Non-Federal Costs	$29,700,000	0

The non-Federal sponsor will reimburse its share of construction costs over a period not to exceed 50 years following completion of construction.

STATUS OF LOCAL COOPERATION: This project is to be 100 percent Federally funded with payback from the Southwestern Power Administration's sale of power. Reimbursement payments will be initiated at the completion of construction.

COMPARISON OF FEDERAL COST ESTIMATES: The current Federal cost estimate of $29,700,000 is the same as last submitted to Congress (FY 1995).

STATUS OF ENVIRONMENTAL IMPACT STATEMENT: An environmental review of the project was completed in January 1991. It was determined that no Environmental Impact Statement or Finding of No Significant Impact was needed.

OTHER INFORMATION: Planning, engineering, and design performed in FY 1992 was accomplished with Operation and Maintenance, General funds. Funds to initiate construction were appropriated in FY 1993. The construction contract was awarded substantially less than estimated. The $9,189,000 contingency remains in the estimate as unprogrammed balance to complete after FY 1996. It is prudent to keep this large contingency, because the extent of damage to the hydropower generating facilities will not be known until the contractor dismantles the units. If internal damage is minor, then contingencies will be reduced.

SOUTHWESTERN DIVISION
JUSTIFICATION OF ESTIMATE

APPROPRIATION TITLE: Operation and Maintenance, General, Fiscal Year 1996

1. Navigation

a. Channels and Harbors.

The budget estimate of $54,633,000 provides for essential operation and maintenance work on 13 channel and harbor projects named in the list which follows. The work to be accomplished under this activity consists of operating and maintaining the coastal navigation channels, harbors and anchorages by means of dredging, constructing bulkheads and spoil disposal areas, snagging, and repairing channel stabilization works, navigation structures, and harbor jetties, all as authorized in the laws pertaining to river and harbor projects.

	ESTIMATED OBLIGATIONS ($)		
	FY 1995	FY 1996	
State	Total	Total	Reason for Change and Major Maintenance Items
Project Name	(Operations)	(Operations)	1. Reasons for change in Operations from FY 95 to FY 96 (10%+/-).
	(Maintenance)	(Maintenance)	2. Major Maintenance Items Budgeted in FY 96 (Threshold $500,000).
Texas			
Brazos Island Harbor	1,045,000	1,038,000	
	(225,000)	(53,000)	1. Completed surveys and monitoring activities in FY 95.
	(820,000)	(985,000)	2. Dredge navigation channel in FY 96.
Channel to Port Mansfield	1,070,000	1,510,000	
	(0)	(0)	1. None.
	(1,070,000)	(1,510,000)	2. Dredge navigation channel in FY 96.
Corpus Christi Ship Channel	3,460,000	2,190,000	
	(225,000)	(0)	1. Completed surveys and monitoring activities in FY 95.
	(3,235,000)	(2,190,000)	2. Dredge navigation channel in FY 96.
Freeport Harbor	4,115,000	2,870,000	
	(65,000)	(0)	1. Completed surveys and monitoring activities in FY 95.
	(4,050,000)	(2,870,000)	2. Dredge navigation channel in FY 96.

SOUTHWESTERN DIVISION
JUSTIFICATION OF ESTIMATE

APPROPRIATION TITLE: Operation and Maintenance, General, Fiscal Year 1996

1. Navigation (Cont'd)

   a. Channels and Harbors. (Cont'd)

State Project Name	ESTIMATED OBLIGATIONS ($) FY 1995 Total (Operations) (Maintenance)	FY 1996 Total (Operations) (Maintenance)	Reason for Change and Major Maintenance Items 1. Reasons for change in Operations from FY 95 to FY 96 (10%+/-). 2. Major Maintenance Items Budgeted in FY 96 (Threshold $500,000).
Texas (Continued)			
Galveston Harbor and Channel	248,000	136,000	
	(0)	(0)	1. None.
	(248,000)	(136,000)	2. None.
GIWW - Channel to Victoria	710,000	1,595,000	
	(410,000)	(460,000)	1. Perform cultural resource activities in FY 96.
	(300,000)	(1,135,000)	2. Dredge navigation channel in FY 96.
Gulf Intracoastal Waterway	21,629,000	17,805,000	
	(3,257,000)	(3,980,000)	1. Perform data collection in FY 96.
	(18,372,000)	(13,825,000)	2. Dredge various reaches of navigation channel in FY 96.
Houston Ship Channel	5,688,000	5,823,000	
	(260,000)	(260,000)	1. None.
	(5,428,000)	(5,563,000)	2. Dredge navigation channel in FY 96.
Matagorda Ship Channel	97,000	5,145,000	
	(97,000)	(0)	1. Completed project condition surveys in FY 95.
	(0)	(5,145,000)	2. Dredge navigation channel in FY 96.
Mouth of Colorado River	1,650,000	1,780,000	
	(0)	(0)	1. None.
	(1,650,000)	1,780,000)	2. Dredge navigation channel in FY 96.

SOUTHWESTERN DIVISION
JUSTIFICATION OF ESTIMATE

APPROPRIATION TITLE: Operation and Maintenance, General, Fiscal Year 1996

1. Navigation (Cont'd)

a. Channels and Harbors. (Cont'd)

State Project Name	ESTIMATED OBLIGATIONS ($) FY 1995 Total (Operations) (Maintenance)	FY 1996 Total (Operations) (Maintenance)	Reason for Change and Major Maintenance Items 1. Reasons for change in Operations from FY 95 to FY 96 (10%+/-). 2. Major Maintenance Items Budgeted in FY 96 (Threshold $500,000).
Texas (Continued)			
Sabine-Neches Waterway	8,268,000	11,946,000	
	(300,000)	(626,000)	1. Perform cultural resource activities in FY 96.
	(7,968,000)	(11,320,000)	2. Dredge navigation channel in FY 96.
Texas City Ship Channel	1,135,000	1,525,000	
	(0)	(0)	1. None.
	(1,135,000)	(1,525,000)	2. Dredge navigation channel in FY 96.
Trinity River and Tributaries	1,188,000	1,270,000	
	(100,000)	(0)	1. Completed cultural resource activities in FY 95.
	(1,088,000)	(1,270,000)	2. Dredge navigation channel in FY 96.
Other Projects Maintained Periodically	2,996,000	0	
	(21,000)	(0)	1. Completed surveys and monitoring activities in FY 95.
	(2,975,000)	(0)	2. None.
Total Channels and Harbors	53,299,000	54,633,000	
	(4,960,000)	(5,379,000)	
	(48,339,000)	(49,254,000)	

SOUTHWESTERN DIVISION
JUSTIFICATION OF ESTIMATE

APPROPRIATION TITLE: Operation and Maintenance, General, Fiscal Year 1996

1. Navigation (Cont'd)

   b. Locks and Dams.

The budget estimate of $25,248,000 provides for operation and essential repairs on one project. Included are: labor, supplies, materials and parts for day-to-day functioning; and periodic dredging, maintenance, repairs, or replacements of channels and structures. The requested amount also includes the application of special recreation use fees for recreation areas.

	ESTIMATED OBLIGATIONS ($)		
State Project Name	FY 1995 Total (Operations) (Maintenance)	FY 1996 Total (Operations) (Maintenance)	Reason for Change and Major Maintenance Items 1. Reasons for change in Operations from FY 95 to FY 96 (10%+/-). 2. Major Maintenance Items Budgeted in FY 96 (Threshold $500,000).
Arkansas and Oklahoma			
McClellan-Kerr Arkansas River Navigation System	22,060,000 (12,804,000) (9,256,000)	25,248,000 (12,408,000) (12,840,000)	1. None. 2. Dredge navigation channel; perform bank stabilization; and install tow haulage equipment on Norrell Lock and Lock No. 2 in FY 96.
Total - Locks and Dams	22,060,000 (12,804,000) (9,256,000)	25,248,000 (12,408,000) (12,840,000)	
TOTAL - NAVIGATION	75,359,000 (17,764,000) (57,595,000)	79,881,000 (17,787,000) (62,094,000)	

SOUTHWESTERN DIVISION
JUSTIFICATION OF ESTIMATE

APPROPRIATION TITLE: Operation and Maintenance, General, Fiscal Year 1996

2. Flood Control

a. Reservoirs.

The budget estimate of $86,221,000 provides for the operation and ordinary maintenance of 70 projects named in the list which follows, and the scheduling of reservoir flood control operations in the Southwestern Division. Included are: labor, supplies, materials and parts for day-to-day functioning. The requested amount also includes the application of special recreation use fees for recreation areas.

	ESTIMATED OBLIGATIONS ($)		
State Project Name	FY 1995 Total (Operations) (Maintenance)	FY 1996 Total (Operations) (Maintenance)	Reason for Change and Major Maintenance Items 1. Reasons for change in Operations from FY 95 to FY 96 (10%+/-). 2. Major Maintenance Items Budgeted in FY 96 (Threshold $500,000).
Arkansas			
Blue Mountain Lake	1,034,000	1,153,000	
	(684,000)	(680,000)	1. None.
	(350,000)	(473,000)	2. None.
DeQueen Lake	948,000	1,096,000	
	(610,000)	(532,000)	1. Realignment of operation and maintenance funding to more realistically reflect work being accomplished.
	(338,000)	(564,000)	2. None.
Dierks Lake	931,000	997,000	
	(589,000)	(542,000)	1. None.
	(342,000)	(455,000)	2. None.
Gillham Lake	943,000	1,006,000	
	(598,000)	(618,000)	1. None.
	(345,000)	(388,000)	2. None.

SOUTHWESTERN DIVISION
JUSTIFICATION OF ESTIMATE

APPROPRIATION TITLE: Operation and Maintenance, General, Fiscal Year 1996

2. Flood Control (Cont'd)

a. Reservoirs. (Cont'd)

State Project Name	ESTIMATED OBLIGATIONS ($) FY 1995 Total (Operations) (Maintenance)	FY 1996 Total (Operations) (Maintenance)	Reason for Change and Major Maintenance Items 1. Reasons for change in Operations from FY 95 to FY 96 (10%+/-). 2. Major Maintenance Items Budgeted in FY 96 (Threshold $500,000).
Arkansas (Continued)			
Millwood Lake	1,866,000	1,789,000	
	(1,157,000)	(1,048,000)	1. None.
	(709,000)	(741,000)	2. None.
Nimrod Lake	1,310,000	1,363,000	
	(821,000)	(840,000)	1. None.
	(489,000)	(523,000)	2. None.
Colorado			
John Martin Reservoir	1,790,000	1,475,000	
	(1,445,000)	(1,070,000)	1. Realignment of operation and maintenance funding to more realistically reflect work being accomplished.
	(345,000)	(405,000)	2. None.
Trinidad Lake	567,000	609,000	
	(553,000)	(468,000)	1. Realignment of operation and maintenance funding to more realistically reflect work being accomplished.
	(14,000)	(141,000)	2. None.

SOUTHWESTERN DIVISION
JUSTIFICATION OF ESTIMATE

APPROPRIATION TITLE: Operation and Maintenance, General, Fiscal Year 1996

2. Flood Control (Cont'd)

a. Reservoirs. (Cont'd)

State Project Name	ESTIMATED OBLIGATIONS ($) FY 1995 Total (Operations) (Maintenance)	 FY 1996 Total (Operations) (Maintenance)	Reason for Change and Major Maintenance Items 1. Reasons for change in Operations from FY 95 to FY 96 (10%+/-). 2. Major Maintenance Items Budgeted in FY 96 (Threshold $500,000).
Kansas			
Council Grove Lake	958,000	1,038,000	
	(567,000)	(569,000)	1. None.
	(391,000)	(469,000)	2. None.
El Dorado Lake	601,000	498,000	
	(430,000)	(360,000)	1. Operational cost savings due to realignment of management efficiencies implemented in FY 96.
	(171,000)	(138,000)	2. None.
Elk City Lake	736,000	765,000	
	(549,000)	(552,000)	1. None.
	(187,000)	(213,000)	2. None.
Fall River Lake	940,000	892,000	
	(606,000)	(580,000)	1. None.
	(334,000)	(312,000)	2. None.
John Redmond Dam and Reservoir	1,838,000	2,238,000	
	(585,000)	(828,000)	1. Clean, replace, and evaluate embankment relief wells, piezometers and toe drains in FY 96.
	(1,253,000)	(1,410,000)	2. Repair embankment in FY 96.

SOUTHWESTERN DIVISION
JUSTIFICATION OF ESTIMATE

APPROPRIATION TITLE: Operation and Maintenance, General, Fiscal Year 1996

2. Flood Control (Cont'd)

a. Reservoirs. (Cont'd)

State Project Name	ESTIMATED OBLIGATIONS ($) FY 1995 Total (Operations) (Maintenance)	 FY 1996 Total (Operations) (Maintenance)	Reason for Change and Major Maintenance Items 1. Reasons for change in Operations from FY 95 to FY 96 (10%+/-). 2. Major Maintenance Items Budgeted in FY 96 (Threshold $500,000).
Kansas (Continued)			
Marion Lake	1,027,000	2,533,000	
	(685,000)	(716,000)	1. None.
	(342,000)	(1,817,000)	2. Repair embankment roadway in FY 96.
Pearson-Skubitz Big Hill Lake	838,000	893,000	
	(536,000)	(603,000)	1. Increase operational activities of recreation facilities in FY 96.
	(302,000)	(290,000)	2. None.
Toronto Lake	402,000	330,000	
	(281,000)	(284,000)	1. None.
	(121,000)	(46,000)	2. None.
Missouri			
Clearwater Lake	1,963,000	2,065,000	
	(1,380,000)	(1,193,000)	1. Realignment of operation and maintenance funding to more realistically reflect work being accomplished.
	(583,000)	(872,000)	2. None.

SOUTHWESTERN DIVISION
JUSTIFICATION OF ESTIMATE

APPROPRIATION TITLE: Operation and Maintenance, General, Fiscal Year 1996

2. Flood Control (Cont'd)

a. Reservoirs. (Cont'd)

State Project Name	ESTIMATED OBLIGATIONS ($) FY 1995 Total (Operations) (Maintenance)	ESTIMATED OBLIGATIONS ($) FY 1996 Total (Operations) (Maintenance)	Reason for Change and Major Maintenance Items 1. Reasons for change in Operations from FY 95 to FY 96 (10%+/-). 2. Major Maintenance Items Budgeted in FY 96 (Threshold $500,000).
New Mexico			
Abiquiu Dam	1,180,000	1,352,000	
	(1,174,000)	(998,000)	1. Realignment of operation and maintenance funding to more realistically reflect work being accomplished.
	(6,000)	(354,000)	2. None.
Cochiti Lake	1,629,000	2,040,000	
	(1,498,000)	(1,407,000)	1. None.
	(131,000)	(633,000)	2. None.
Conchas Lake	1,222,000	1,134,000	
	(822,000)	(975,000)	1. Realignment of operation and maintenance funding to more realistically reflect work being accomplished.
	(400,000)	(159,000)	2. None.
Galisteo Dam	254,000	244,000	
	(254,000)	(241,000)	1. None.
	(0)	(3,000)	2. None.
Jemez Canyon Dam	396,000	398,000	
	(396,000)	(388,000)	1. None.
	(0)	(10,000)	2. None.

SOUTHWESTERN DIVISION
JUSTIFICATION OF ESTIMATE

APPROPRIATION TITLE: Operation and Maintenance, General, Fiscal Year 1996

2. Flood Control (Cont'd)

a. Reservoirs. (Cont'd)

State Project Name	ESTIMATED OBLIGATIONS ($) FY 1995 Total (Operations) (Maintenance)	ESTIMATED OBLIGATIONS ($) FY 1996 Total (Operations) (Maintenance)	Reason for Change and Major Maintenance Items 1. Reasons for change in Operations from FY 95 to FY 96 (10%+/-). 2. Major Maintenance Items Budgeted in FY 96 (Threshold $500,000).
New Mexico (Continued)			
Santa Rosa Dam & Lake	780,000 (757,000) (23,000)	998,000 (877,000) (121,000)	1. Realignment of operation and maintenance funding to more realistically reflect work being accomplished. 2. None.
Two Rivers Dam	295,000 (269,000) (26,000)	356,000 (323,000) (33,000)	1. Conduct periodic inspection in FY 96. 2. None.
Oklahoma			
Arcadia Lake	321,000 (217,000) (104,000)	292,000 (260,000) (32,000)	1. Clean, replace, and evaluate embankment relief wells, piezometers and toe drains in FY 96. 2. None.
Birch Lake	751,000 (473,000) (278,000)	749,000 (498,000) (251,000)	1. None. 2. None.
Candy Lake	45,000 (45,000) (0)	39,000 (39,000) (0)	1. Installed fence in FY 95. 2. None.

SOUTHWESTERN DIVISION
JUSTIFICATION OF ESTIMATE

APPROPRIATION TITLE: Operation and Maintenance, General, Fiscal Year 1996

2. Flood Control (Cont'd)

a. Reservoirs. (Cont'd)

State Project Name	ESTIMATED OBLIGATIONS ($) FY 1995 Total (Operations) (Maintenance)	ESTIMATED OBLIGATIONS ($) FY 1996 Total (Operations) (Maintenance)	Reason for Change and Major Maintenance Items 1. Reasons for change in Operations from FY 95 to FY 96 (10%+/-). 2. Major Maintenance Items Budgeted in FY 96 (Threshold $500,000).
Oklahoma (Continued)			
Canton Lake	1,756,000	1,692,000	
	(719,000)	(1,024,000)	1. Increase operational activities of recreation facilities and perform water quality study and environmental assessment in FY 96.
	(1,037,000)	(668,000)	2. None.
Copan Lake	909,000	874,000	
	(604,000)	(556,000)	1. None.
	(305,000)	(318,000)	2. None.
Fort Supply Lake	863,000	847,000	
	(505,000)	(574,000)	1. Perform water quality study in FY 96.
	(358,000)	(273,000)	2. None.
Great Salt Plains Lake	347,000	337,000	
	(289,000)	(290,000)	1. None.
	(58,000)	(47,000)	2. None.
Heyburn Lake	682,000	754,000	
	(456,000)	(471,000)	1. None.
	(226,000)	(283,000)	2. None.
Hugo Lake	1,547,000	1,527,000	
	(859,000)	(940,000)	1. None.
	(688,000)	(587,000)	2. None.

APPROPRIATION TITLE: Operation and Maintenance, General, Fiscal Year 1996

2. Flood Control (Cont'd)

a. Reservoirs. (Cont'd)

State Project Name	ESTIMATED OBLIGATIONS ($) FY 1995 Total (Operations) (Maintenance)	ESTIMATED OBLIGATIONS ($) FY 1996 Total (Operations) (Maintenance)	Reason for Change and Major Maintenance Items 1. Reasons for change in Operations from FY 95 to FY 96 (10%+/-). 2. Major Maintenance Items Budgeted in FY 96 (Threshold $500,000).
Oklahoma (Continued)			
Hulah Lake	463,000	401,000	
	(382,000)	(338,000)	1. Decreased requirement of permanent operating equipment in FY 96.
	(81,000)	(63,000)	2. None.
Kaw Lake	1,553,000	1,702,000	
	(1,060,000)	(1,227,000)	1. Increase operational activities of recreation facilities in FY 96.
	(493,000)	(475,000)	2. None.
Oologah Lake	1,307,000	1,373,000	
	(769,000)	(886,000)	1. Increase operational activities of recreation facilities in FY 96.
	(538,000)	(487,000)	2. None.
Optima Lake	513,000	511,000	
	(366,000)	(332,000)	1. None.
	(147,000)	(179,000)	2. None.
Pensacola Reservoir - Lake O' the Cherokees	4,000	5,000	
	(4,000)	(5,000)	1. Increase operational and administrative activities in FY 96.
	(0)	(0)	2. None.

SOUTHWESTERN DIVISION
JUSTIFICATION OF ESTIMATE

APPROPRIATION TITLE: Operation and Maintenance, General, Fiscal Year 1996

2. Flood Control (Cont'd)

a. Reservoirs. (Cont'd)

State Project Name	ESTIMATED OBLIGATIONS ($) FY 1995 Total (Operations) (Maintenance)	ESTIMATED OBLIGATIONS ($) FY 1996 Total (Operations) (Maintenance)	Reason for Change and Major Maintenance Items 1. Reasons for change in Operations from FY 95 to FY 96 (10%+/-). 2. Major Maintenance Items Budgeted in FY 96 (Threshold $500,000).
Oklahoma (Continued)			
Pine Creek Lake	1,065,000	1,168,000	
	(753,000)	(692,000)	1. None.
	(312,000)	(476,000)	2. None.
Sardis Lake	809,000	857,000	
	(526,000)	(603,000)	1. Conduct periodic inspection and increase operational activities of recreation facilities in FY 96.
	(283,000)	(254,000)	2. None.
Skiatook Lake	821,000	789,000	
	(431,000)	(555,000)	1. Increase operational activities of recreation facilities in FY 96.
	(390,000)	(234,000)	2. None.
Waurika Lake	1,353,000	1,894,000	
	(756,000)	(698,000)	1. None.
	(597,000)	(1,196,000)	2. None.
Wister Lake	862,000	947,000	
	(583,000)	(632,000)	1. None.
	(279,000)	(315,000)	2. None.

SOUTHWESTERN DIVISION
JUSTIFICATION OF ESTIMATE

APPROPRIATION TITLE: Operation and Maintenance, General, Fiscal Year 1996

2. Flood Control (Cont'd)

a. Reservoirs. (Cont'd)

State Project Name	ESTIMATED OBLIGATIONS ($) FY 1995 Total (Operations) (Maintenance)	 FY 1996 Total (Operations) (Maintenance)	Reason for Change and Major Maintenance Items 1. Reasons for change in Operations from FY 95 to FY 96 (10%+/-). 2. Major Maintenance Items Budgeted in FY 96 (Threshold $500,000).
Texas			
Aquilla Lake	639,000	623,000	
	(442,000)	(468,000)	1. None.
	(197,000)	(155,000)	2. None.
Arkansas-Red River Basins Chloride Control (Area VIII)	994,000	1,139,000	
	(632,000)	(653,000)	1. None.
	(362,000)	(486,000)	2. None.
Bardwell Lake	1,107,000	1,210,000	
	(903,000)	(909,000)	1. None.
	(204,000)	(301,000)	2. None.
Belton Lake	2,036,000	2,249,000	
	(1,644,000)	(1,697,000)	1. None.
	(392,000)	(552,000)	2. None.
Benbrook Lake	1,445,000	1,610,000	
	(1,137,000)	(1,151,000)	1. None.
	(308,000)	(459,000)	2. None.

SOUTHWESTERN DIVISION
JUSTIFICATION OF ESTIMATE

APPROPRIATION TITLE: Operation and Maintenance, General, Fiscal Year 1996

2. Flood Control (Cont'd)

a. Reservoirs. (Cont'd)

State Project Name	ESTIMATED OLIGATIONS ($) FY 1995 Total (Operations) (Maintenance)	FY 1996 Total (Operations) (Maintenance)	Reason for Change and Major Maintenance Items 1. Reasons for change in Operations from FY 95 to FY 96 (10%+/-). 2. Major Maintenance Items Budgeted in FY 96 (Threshold $500,000).
Texas (Continued)			
Buffalo Bayou and Tributaries	3,342,000	3,649,000	
	(1,769,000)	(1,709,000)	1. None.
	(1,573,000)	(1,940,000)	2. None.
Canyon Lake	1,431,000	1,657,000	
	(1,086,000)	(1,095,000)	1. None.
	(345,000)	(562,000)	2. None.
Cooper Lake and Channels	1,912,000	874,000	
	(723,000)	(807,000)	1. Increase operational activities of wildlife mitigation areas in FY 96.
	(1,189,000)	(67,000)	2. Completed shoreline erosion repair in FY 95.
Ferrell's Bridge Dam - Lake O' the Pines	2,091,000	2,130,000	
	(1,408,000)	(1,407,000)	1. None.
	(683,000)	(723,000)	2. None.
Granger Dam and Lake	1,261,000	1,459,000	
	(1,035,000)	(1,123,000)	1. None.
	(226,000)	(336,000)	2. None.

SOUTHWESTERN DIVISION
JUSTIFICATION OF ESTIMATE

APPROPRIATION TITLE: Operation and Maintenance, General, Fiscal Year 1996

2. Flood Control (Cont'd)

a. Reservoirs. (Cont'd)

State Project Name	ESTIMATED OBLIGATIONS ($) FY 1995 Total (Operations) (Maintenance)	 FY 1996 Total (Operations) (Maintenance)	Reason for Change and Major Maintenance Items 1. Reasons for change in Operations from FY 95 to FY 96 (10%+/-). 2. Major Maintenance Items Budgeted in FY 96 (Threshold $500,000).
Texas (Continued)			
Grapevine Lake	1,879,000	1,956,000	
	(1,529,000)	(1,459,000)	1. None.
	(350,000)	(497,000)	2. None.
Hords Creek Lake	1,096,000	1,007,000	
	(708,000)	(708,000)	1. None.
	(388,000)	(299,000)	2. None.
Joe Pool Lake	725,000	810,000	
	(588,000)	(572,000)	1. None.
	(137,000)	(238,000)	2. None.
Lake Kemp	205,000	218,000	
	(205,000)	(191,000)	1. None.
	(0)	(27,000)	2. None.
Lavon Lake	2,039,000	2,303,000	
	(1,668,000)	(1,666,000)	1. None.
	(371,000)	(637,000)	2. None.
Lewisville Dam	2,202,000	2,798,000	
	(1,832,000)	(1,843,000)	1. None.
	(370,000)	(955,000)	2. None.

SOUTHWESTERN DIVISION
JUSTIFICATION OF ESTIMATE

APPROPRIATION TITLE: Operation and Maintenance, General, Fiscal Year 1996

2. Flood Control (Cont'd)

a. Reservoirs. (Cont'd)

State Project Name	ESTIMATED OBLIGATIONS ($) FY 1995 Total (Operations) (Maintenance)	ESTIMATED OBLIGATIONS ($) FY 1996 Total (Operations) (Maintenance)	Reason for Change and Major Maintenance Items 1. Reasons for change in Operations from FY 95 to FY 96 (10%+/-). 2. Major Maintenance Items Budgeted in FY 96 (Threshold $500,000).
Texas (Continued)			
Navarro Mills Lake	1,213,000	1,388,000	
	(929,000)	(934,000)	1. None.
	(284,000)	(454,000)	2. None.
North San Gabriel Dam and Lake Georgetown	1,232,000	1,540,000	
	(997,000)	(1,114,000)	1. Increase water control management activities in FY 96.
	(235,000)	(426,000)	2. None.
O. C. Fisher Dam and Lake	1,052,000	1,120,000	
	(886,000)	(821,000)	1. None.
	(166,000)	(299,000)	2. None.
Pat Mayse Lake	771,000	873,000	
	(470,000)	(583,000)	1. Increase operational activities of recreation facilities and oversight of real estate activities in FY 96.
	(301,000)	(290,000)	2. None.
Proctor Lake	1,395,000	1,528,000	
	(1,074,000)	(1,057,000)	1. None.
	(321,000)	(471,000)	2. None.

SOUTHWESTERN DIVISION
JUSTIFICATION OF ESTIMATE

APPROPRIATION TITLE: Operation and Maintenance, General, Fiscal Year 1996

2. Flood Control (Cont'd)

a. Reservoirs. (Cont'd)

State Project Name	ESTIMATED OBLIGATIONS ($) FY 1995 Total (Operations) (Maintenance)	 FY 1996 Total (Operations) (Maintenance)	Reason for Change and Major Maintenance Items 1. Reasons for change in Operations from FY 95 to FY 96 (10%+/-). 2. Major Maintenance Items Budgeted in FY 96 (Threshold $500,000).
Texas (Continued)			
Ray Roberts Lake	748,000	783,000	
	(621,000)	(669,000)	1. None.
	(127,000)	(114,000)	2. None.
Somerville Lake	2,114,000	2,282,000	
	(1,772,000)	(1,480,000)	1. Completed sedimentation resurvey in FY 95.
	(342,000)	(802,000)	2. None.
Stillhouse Hollow Dam	1,366,000	1,519,000	
	(1,173,000)	(1,211,000)	1. None.
	(193,000)	(308,000)	2. None.
Waco Lake	1,973,000	2,014,000	
	(1,461,000)	(1,542,000)	1. None.
	(512,000)	(472,000)	2. None.
Wallisville Lake	561,000	473,000	
	(284,000)	(298,000)	1. None.
	(277,000)	(175,000)	2. None.
Wright Patman Dam and Lake	2,053,000	2,326,000	
	(1,599,000)	(1,629,000)	1. None.
	(454,000)	(697,000)	2. None.

SOUTHWESTERN DIVISION
JUSTIFICATION OF ESTIMATE

APPROPRIATION TITLE: Operation and Maintenance, General, Fiscal Year 1996

2. Flood Control (Cont'd)

a. Reservoirs. (Cont'd)

State Project Name	ESTIMATED OBLIGATIONS ($) FY 1995 Total (Operations) (Maintenance)	 FY 1996 Total (Operations) (Maintenance)	Reason for Change and Major Maintenance Items 1. Reasons for change in Operations from FY 95 to FY 96 (10%+/-). 2. Major Maintenance Items Budgeted in FY 96 (Threshold $500,000).
Scheduling Reservoir			
Operations	609,000	663,000	
	(609,000)	(663,000)	1. None.
	(0)	(0)	2. None.
Total Reservoirs	79,910,000	86,221,000	
	(56,227,000)	(56,771,000)	
	(23,683,000)	(29,450,000)	

SOUTHWESTERN DIVISION
JUSTIFICATION OF ESTIMATE

APPROPRIATION TITLE: Operation and Maintenance, General, Fiscal Year 1996

2. Flood Control (Cont'd)

b. Channel improvement, inspection, and miscellaneous maintenance.

The budget estimate of $768,000 provides for inspection of completed work and miscellaneous maintenance during the budget year, including maintenance of data collection and testing stations for potential control of chloride in groundwater.

State Project Name	ESTIMATED OBLIGATIONS ($) FY 1995 Total (Operations) (Maintenance)	ESTIMATED OBLIGATIONS ($) FY 1996 Total (Operations) (Maintenance)	Reason for Change and Major Maintenance Items 1. Reasons for change in Operations from FY 95 to FY 65 (10%+/-). 2. Major Maintenance Items Budgeted in FY 96 (Threshold $500,000).
Texas			
Estelline Springs Experimental Project	4,000	12,000	
	(4,000)	(12,000)	1. Increase operational and administrative activities in FY 96.
	(0)	(0)	2. None.
Inspection of Completed Works	707,000	756,000	
	(707,000)	(756,000)	1. None.
	(0)	(0)	2. None.
Total Channel Improvements, Inspections, and Miscellaneous Maintenance	711,000	768,000	
	(711,000)	(768,000)	
	(0)	(0)	
	============	============	
TOTAL - FLOOD CONTROL	80,621,000	86,989,000	
	(56,938,000)	(57,539,000)	
	(23,683,000)	(29,450,000)	

SOUTHWESTERN DIVISION
JUSTIFICATION OF ESTIMATE

APPROPRIATION TITLE: Operation and Maintenance, General, Fiscal Year 1996

3. Multiple Purpose Power Projects

The budget estimate of $74,425,000 provides for the operation and maintenance of 18 multiple purpose projects named in the list which follows. These projects have a current operational capacity of 1,726,200 kilowatts. Annual requirements are for the operation and ordinary maintenance of project facilities, labor, supplies, materials, and parts required for the day-to-day functioning. The requested amount also includes the application of special recreation use fees for recreation areas.

State Project Name	ESTIMATED OBLIGATIONS ($) FY 1995 Total (Operations) (Maintenance)	 FY 1996 Total (Operations) (Maintenance)	Reason for Change and Major Maintenance Items 1. Reasons for change in Operations from FY 95 to FY 96 (10%+/-). 2. Major Maintenance Items Budgeted in FY 96 (Threshold $500,000).
Arkansas			
Beaver Lake	3,857,000	3,983,000	
	(2,299,000)	(2,701,000)	1. Realignment of operation and maintenance funding to more realistically reflect work being accomplished.
	(1,558,000)	(1,282,000)	2. None.
Bull Shoals Lake	4,740,000	4,575,000	
	(2,402,000)	(2,314,000)	1. None.
	(2,338,000)	(2,261,000)	2. None.
Dardanelle Lock and Dam	5,294,000	6,385,000	
	(3,269,000)	(3,227,000)	1. None.
	(2,025,000)	(3,158,000)	2. None.
Greers Ferry Lake	4,667,000	4,447,000	
	(2,752,000)	(2,444,000)	1. Realignment of operation and maintenance funding to more realistically reflect work being accomplished.
	(1,915,000)	(2,003,000)	2. None.

SOUTHWESTERN DIVISION
JUSTIFICATION OF ESTIMATE

APPROPRIATION TITLE: Operation and Maintenance, General, Fiscal Year 1996

3. Multiple Purpose Power Projects (Continued)

State Project Name	ESTIMATED OBLIGATIONS ($) FY 1995 Total (Operations) (Maintenance)	 FY 1996 Total (Operations) (Maintenance)	Reason for Change and Major Maintenance Items 1. Reasons for change in Operations from FY 95 to FY 96 (10%+/-). 2. Major Maintenance Items Budgeted in FY 96 (Threshold $500,000).
Arkansas (Continued)			
Norfork Lake	3,964,000	3,582,000	
	(1,931,000)	(1,740,000)	1. None.
	(2,033,000)	(1,842,000)	2. None.
Ozark-Jeta Taylor Lock and Dam	3,836,000	4,175,000	
	(2,175,000)	(2,205,000)	1. None.
	(1,661,000)	(1,970,000)	2. None.
Missouri			
Table Rock Lake	5,881,000	5,565,000	
	(3,406,000)	(3,238,000)	1. None.
	(2,475,000)	(2,327,000)	2. Initiate rewind of generator in FY 96.
Oklahoma			
Broken Bow Lake	1,871,000	2,059,000	
	(865,000)	(695,000)	1. Remote operation of powerhouse has decreased operational costs of project in FY 96.
	(1,006,000)	(1,364,000)	2. None.

SOUTHWESTERN DIVISION
JUSTIFICATION OF ESTIMATE

APPROPRIATION TITLE: Operation and Maintenance, General, Fiscal Year 1996

3. Multiple Purpose Power Projects (Continued)

State Project Name	ESTIMATED OBLIGATIONS ($) FY 1995 Total (Operations) (Maintenance)	 FY 1996 Total (Operations) (Maintenance)	Reason for Change and Major Maintenance Items 1. Reasons for change in Operations from FY 95 to FY 96 (10%+/-). 2. Major Maintenance Items Budgeted in FY 96 (Threshold $500,000).
Oklahoma (Continued)			
Eufaula Lake	3,797,000	4,405,000	
	(1,813,000)	(2,226,000)	1. Increase operational activities of recreation facilities and perform real estate activities to address encroachment problems in FY 96.
	(1,984,000)	(2,179,000)	2. None.
Fort Gibson Lake	3,503,000	4,271,000	
	(2,217,000)	(2,206,000)	1. None.
	(1,286,000)	(2,065,000)	2. Replace obsolete powerhouse switchyard circuit breakers in FY 96.
Keystone Lake	3,082,000	3,819,000	
	(1,629,000)	(2,028,000)	1. Increase management of natural resource areas and operational activities of recreation facilities in FY 96.
	(1,453,000)	(1,791,000)	2. None.
Robert S. Kerr Lock and Dam and Reservoir	3,700,000	4,862,000	
	(1,925,000)	(2,038,000)	1. None.
	(1,775,000)	(2,824,000)	2. Repair rock dike at Canadian River confluence in FY 96.
Tenkiller Ferry Lake	3,130,000	3,371,000	
	(1,933,000)	(1,665,000)	1. Decrease management of natural resource areas in FY 96.
	(1,197,000)	(1,706,000)	2. None.

SOUTHWESTERN DIVISION
JUSTIFICATION OF ESTIMATE

APPROPRIATION TITLE: Operation and Maintenance, General, Fiscal Year 1996

3. Multiple Purpose Power Projects (Continued)

State Project Name	ESTIMATED OBLIGATIONS ($) FY 1995 Total (Operations) (Maintenance)	FY 1996 Total (Operations) (Maintenance)	Reason for Change and Major Maintenance Items 1. Reasons for change in Operations from FY 95 to FY 96 (10%+/-). 2. Major Maintenance Items Budgeted in FY 96 (Threshold $500,000).
Oklahoma (Continued)			
Webbers Falls Lock and Dam	2,847,000	3,515,000	
	(1,466,000)	(1,599,000)	1. None.
	(1,381,000)	(1,916,000)	2. None.
Texas			
Denison Dam - Lake Texoma	4,891,000	6,033,000	
	(2,574,000)	(2,803,000)	1. None.
	(2,317,000)	(3,230,000)	2. Replace generator switchgear to powerhouse in FY 96.
Sam Rayburn Dam and Reservoir	3,698,000	4,217,000	
	(2,437,000)	(2,377,000)	1. None.
	(1,261,000)	(1,840,000)	2. None.
Town Bluff Dam, B. A. Steinhagen Lake and Robert Douglas Willis Hydropower Project	1,472,000	1,502,000	
	(1,058,000)	(1,048,000)	1. None.
	(414,000)	(454,000)	2. None.

SOUTHWESTERN DIVISION
JUSTIFICATION OF ESTIMATE

APPROPRIATION TITLE: Operation and Maintenance, General, Fiscal Year 1996

3. Multiple Purpose Power Projects (Continued)

State Project Name	ESTIMATED OBLIGATIONS ($) FY 1995 Total (Operations) (Maintenance)	 FY 1996 Total (Operations) (Maintenance)	Reason for Change and Major Maintenance Items 1. Reasons for change in Operations from FY 95 to FY 96 (10%+/-). 2. Major Maintenance Items Budgeted in FY 96 (Threshold $500,000).
Texas (Continued)			
Whitney Lake	3,839,000	3,659,000	
	(2,344,000)	(2,355,000)	1. None.
	(1,495,000)	(1,304,000)	2. None.
	============	============	
TOTAL - MULTIPLE PURPOSE POWER PROJECTS	68,069,000	74,425,000	
	(38,495,000)	(38,909,000)	
	(29,574,000)	(35,516,000)	

SOUTHWESTERN DIVISION
JUSTIFICATION OF ESTIMATE

APPROPRIATION TITLE: Operation and Maintenance, General, Fiscal Year 1996

4. Protection of Navigation

The budget estimate of $73,000 provides for accomplishing the work essential to project condition surveys on some projects for which maintenance is not scheduled in the budget year.

	ESTIMATED OBLIGATIONS ($)		
State Project Name	FY 1995 Total (Operations) (Maintenance)	FY 1996 Total (Operations) (Maintenance)	Reason for Change and Major Maintenance Items 1. Reasons for change in Operations from FY 95 to FY 96 (10%+/-). 2. Major Maintenance Items Budgeted in FY 96 (Threshold $500,000).
Project Condition Surveys	82,000 (82,000) (0)	73,000 (73,000) (0)	1. Reduction in hired labor costs in FY 96. 2. None.
TOTAL - PROTECTION OF NAVIGATION	82,000 (82,000) (0)	73,000 (73,000) (0)	
GRAND TOTAL - SOUTHWESTERN DIVISION	224,131,000 (113,279,000) (110,852,000)	241,368,000 (114,308,000) (127,060,000)	

CONTRIBUTION OF COLONEL KING

Mr. MYERS. Well, thank you, Colonel King, for your contribution through the years to help make our country a better place and be more competitive in the world with transportation. It has been a long, long time. I know it doesn't seem like it right now. It seems like only yesterday that you entered the Army, I am sure.

Colonel KING. Yes, sir.

Mr. MYERS. I feel like—I have been here 30 years and it seems like just yesterday we got here. So I wish you well.

Colonel KING. Thank you, sir.

Mr. MYERS. When is your retirement date?

Colonel KING. This summer, August.

Mr. MYERS. I imagine you will come back and see us once in awhile, I hope you will, once you change hats.

Colonel KING. Thank you, sir.

Mr. MYERS. Mr. Chapman?

Mr. CHAPMAN. Mr. Chairman, thank you, and, Colonel King, thank you for your testimony. I apologize for being a little late. I was trying to be the stealth Congressman, slip in in the dark and unfortunately the lights are on in the adjoining room so it is a little obvious when you do that.

Colonel KING. Yes, sir.

NEW POLICY IMPACTS

Mr. CHAPMAN. Anyway, there have been a number of questions asked about new Corps policy from the standpoint of flood control, and there were questions I suspect asked of most of the divisions as well as folks from the chief's office, but I want to specifically ask you about the Southwestern Division, Fort Worth District. What impact would the new Corps proposed policy for flood control have on the Southwestern Division?

Colonel KING. Mr. Chapman, we are still evaluating the total impact of the policies, as we know them, that have been generated over the last month or five weeks. Certainly a number of studies and PED efforts and construction, as you know, would be affected. However, I am glad for the fact that if a project is in construction, we will complete that phase and if we are in a study phase, then we will complete that phase. So there will be a number of projects and various aspects of the new policy, be they the turnover of the flood control reservoirs in our area in Texas and Oklahoma.

I say most immediately, the answer to your specific question, without going too broad, within the division probably in 1996 are about 40 positions affected. There are any number of studies and projects that will not continue.

Mr. CHAPMAN. Do you see—in asking specifically about Texas, do you see built into that new policy, should it be implemented, inequities in definition of what would qualify as a flood control project that would have Corps involvement where you may have—as asked yesterday of General Genetti, where there are literally hundreds and hundreds of miles perhaps of rivers and potential flooding that is all contained within the boundaries of Texas, when perhaps in other areas of the country, the flooding problems would, within just a matter of a few miles, potentially cross two or more

State lines. That automatically creates somewhat of a fairness problem. Would you agree with that?

Colonel KING. I think that there is a basis for the policies the administration has developed. I think the policies are going to take a great effort to explain to our partners and our customers. The word is filtering out to many of them. We have a very large partnering conference that I will host in Dallas that many of our customers on the civil works side, and the military, by the way, will also come to in April. It is just something we are going to have to work on a case-by-case basis with all five of my districts, and with all those partners they work with out there.

POTENTIAL HOUSTON FLOODING

Mr. CHAPMAN. Could it be—do you see in either a 50 or 100 year flood scenario, for example, that the city of Houston could potentially sustain traumatic and very expensive damage from flooding that originates well within the bounds of Texas?

Colonel KING. Yes, sir, Mr. Chapman, and of course Harris County is a very proactive partner involved with ongoing studies and projects. There are many projects down there.

Mr. CHAPMAN. Would it be fair to say that you have historically been very active in that area and continue to be?

Colonel KING. Yes, sir.

Mr. CHAPMAN. And under this new policy, I presume Corps involvement in that would stop.

Colonel KING. We have a number of projects that are under way in the Houston area, but there are a number of others, out-year projects, very large projects, Buffalo Bayou and Tributaries and others that would not be completed under the new policy.

Mr. CHAPMAN. Do you think, Colonel, just from experience, that it would be fair to say that potential damage in a city the size of Houston could literally be up in the hundreds of millions of dollars in that kind of event?

Colonel KING. Oh, yes, sir. In the most recent October flooding of last year, the damages prevented by our structures were somewhere in the range of $300 million, and that was with a storm that really went north and east of the city. It really didn't hit downtown proper and the northwest and the Addicks and Barker reservoir areas. But it would be catastrophic, that frequency of a storm on nearly any metropolitan city in the country, I would say.

[CLERK'S NOTE.—Additional clarifying information was provided by Colonel King for the record as follows:]

Including the October flood of last year, the total flood damages prevented by our structures in the Houston area were estimated at approximately $300 million. From the October 1994 storm, damages of over $100 million were sustained on streams for which authorized Corps projects have not been completed. The storm was north and east of the city. It did not hit downtown proper, and the northwest area, Addicks and Barker Reservoirs area. That frequency of a storm would be catastrophic on any metropolitan city in the country.

Mr. CHAPMAN. Some areas have done sort of an after-construction cost-benefit analysis based on actual events. Have you done, within the division, any kind of analysis that looks at either—perhaps maybe it might even be more regional than statewide, but looking either at the Dallas area, the Houston area, the taxpayer investment, or specifically I guess public investment which could be of course both Federal and others, or what damage has been prevented based on the investment in your division?

Colonel KING. Well, historically, the last one we had, for six projects in the Dallas-Fort Worth area it was nearly $35 return for every dollar of investment that we have had.

Mr. CHAPMAN. We would kind of like to get that on the record. I started to say that is even better than some cattle futures but I maybe should not say that.

Colonel KING. Sure.

Mr. CHAPMAN. But it is not a bad investment of taxpayer funds, would you say?

Colonel KING. Thirty-five to one is a very healthy return on your investment.

Mr. CHAPMAN. Colonel, as those analyses are completed, I would appreciate them for the record if you could.

Colonel KING. Yes, sir.

[The information follows:]

FLOOD DAMAGES PREVENTED, FDP, VERSUS INVESTMENT DALLAS/FORT WORTH AND HOUSTON, TEXAS AREAS

DALLAS/FORTH WORTH METROPLEX
CUMULATIVE THRU FISCAL YEAR 1994

STATE PROJECT	FLOOD DAMAGES PREVENTED ($000)	CONSTRUCTION COSTS ($000)	O&M COSTS ($000)	TOTAL COSTS ($000)
BENBROOK LAKE	2,234,003	13,070	27,527	40,597
FORT WORTH FLOODWAY	(1)	3,900	—	3,900
GRAPEVINE LAKE	3,288,479	21,317	33,526	54,843
LEWISVILLE DAM/RAY ROBERTS LAKE	11,506,018	329,383	50,269	379,652
DALLAS FLOODWAY	(2)	8,300	--	8,300
JOE POOL LAKE	415,639	188,779	4,705	193,484
DALLAS/FORT WORTH SUBTOTAL	17,444,139			680,776

DALLAS/FORT WORTH FDP/TOTAL COST RATIO = 25.6 (3)

(1) Flood damages prevented included with Benbrook Lake.
(2) Flood damages prevented included with Lewisville Dam/Ray Roberts Lake and Grapevine Lake.
(3) This ratio includes Joe Pool Lake which makes seven projects in the Dallas/Fort Worth Metroplex. This is different from the six project ratio used in previous statements.

HOUSTON METROPOLITAN AREA
CUMULATIVE THRU FISCAL YEAR 1994

STATE PROJECT	FLOOD DAMAGES PREVENTED ($000)	CONSTRUCTION COSTS ($000)	O&M COSTS ($000)	TOTAL COSTS ($000)
BUFFALO BAYOU AND TRIBUTARIES	1,549,962	86,830	27,815	114,645
HOUSTON SUBTOTAL	1,549,962			114,645

HOUSTON FDP/TOTAL COST RATIO = 13.5

NEW FLOOD CONTROL POLICY IMPACTS

Mr. CHAPMAN. Colonel, I would appreciate for the record if you could, and it does not have to be in great detail, but I would like to know, if we could, the projects, you said some 40 odd projects, if you could give me an outline of what those would be, as well as a list of the studies, the studies and the ongoing things that this policy would impact. I would like to be able to have something that is—that I can literally say, here is at least an initial review of projects within my State. If you could make it Texas specific——

Colonel KING. Yes, sir.

Mr. CHAPMAN [continuing]. That would appear to be impacted by this policy change, and whether it be construction—how it would impact construction currently under way, and then propose planning studies and reconnaissance studies and so forth. I would appreciate that.

Colonel KING. I would be pleased to provide that for the record.

[The information follows:]

CORPS NEW POLICY PROPOSALS

The current impact to Texas studies and projects was the removal of the following new phase studies and projects, including new starts, from the Fiscal Year 1996 budget request:

GENERAL INVESTIGATIONS

RECONNAISSANCE PHASE STUDIES
- Alpine, Texas
- Buffalo Bayou and Tributaries, Texas
- Galveston Beach Erosion, Texas
- Guadalupe and San Antonio Rivers, Texas
- Lower Brazos River, Texas
- Middle Brazos River, Texas
- Northwest El Paso, Texas
- Waller Creek, Austin, Texas

FEASIBILITY PHASE STUDIES
- Buffalo Bayou and Tributaries, Addicks and Barker Reservoirs, Texas
- Plainview, Brazos River Basin, Texas

PRECONSTRUCTION, ENGINEERING AND DESIGN PHASE PROJECTS
- Graham, Brazos River Basin, Texas
- Raymondville Drain, Texas

CONSTRUCTION, GENERAL

- Shoal Creek, Austin, Texas

The long-term future impact, in addition to the studies and projects listed above, would include the possible termination of ongoing studies and projects after completion of the applicable current phase. A list of these studies and projects include:

GENERAL INVESTIGATIONS

FEASIBILITY PHASE STUDIES
- Pecan Bayou, Brownwood, Texas
- Upper Trinity River Basin, Texas

PRECONSTRUCTION, ENGINEERING AND DESIGN PHASE PROJECTS
- Brays Bayou, Houston, Texas
- Cypress Creek, Houston, Texas
- Dallas Floodway Extension, Trinity River Project, Texas
- Greens Bayou, Houston, Texas
- South Main Channel, Texas

Also, the following preliminary list of Corps-operated projects could possibly be transferred to non-Federal entities:

OPERATION AND MAINTENANCE

Aquilla Lake, Texas
Bardwell Lake, Texas
Belton Lake, Texas
Benbrook Lake, Texas
Buffalo Bayou and Tributaries, Texas
Canyon Lake, Texas
Granger Dam and Lake, Texas
Grapevine Lake, Texas
Hords Creek Lake, Texas
Joe Pool Lake, Texas
Lake Kemp, Texas
Lavon Lake, Texas
Lewisville Dam, Texas
Navarro Mills Lake, Texas
North San Gabriel Dam and Lake Georgetown, Texas
O. C. Fisher Dam and Lake, Texas
Proctor Lake, Texas
Ray Roberts Lake, Texas
Somerville Lake, Texas
Stillhouse Hollow Dam, Texas
Waco Lake, Texas
Wallisville Lake, Texas

The following Federally maintained shallow draft harbors would possibly be transferred to non-Federal entities:

OPERATION AND MAINTENANCE

Cedar Bayou, Texas
Clear Creek and Lake, Texas
Double Bayou, Texas
Little Bay, Texas
Oyster Creek, Texas
Trinity River, Texas

NEW FLOOD CONTROL POLICY DEVELOPMENT PROCESS

Mr. CHAPMAN. Were you contacted, to your knowledge, at the division from headquarters before this—did someone ask you ahead of time what you thought about this policy? Did you have any input in it?

Colonel KING. Our role was to support the effort—and very difficult effort, I might add—but I would have to say in direct response to your question, our role was mainly one of developing some costs involved with the impact of various options that went into the thought of how we can reduce government in accordance with the budget and the Reinventing Government initiatives of the administration.

Mr. CHAPMAN. They didn't ask you to send along an editorial opinion, though, along with the cost estimates?

Colonel KING. No, sir.

COST SHARING PARTNERS

Mr. CHAPMAN. Do you know, and I am asking you a subjective question but I am going to ask it anyway, based upon your knowledge of your cost-sharing partners and the work you are doing within the division, can you give me your best estimate, ballpark, if the cost-sharing ratio were flipped where it were 25 percent Federal and 75 percent local sponsored, how many of those projects would have gone forward?

Colonel KING. Sir, I can't do that this morning. I would be glad to do an analysis and provide that information for the record.

Mr. CHAPMAN. Thank you, Colonel. I appreciate that, if you could.

[The information follows:]

COST-SHARING POLICY

After a cursory analysis of the new cost-sharing policy impacts on existing and ongoing projects, we believe that the Mingo Creek, Tulsa, Oklahoma project, would have been undertaken. A more detailed analysis could possibly identify additional projects. However, previous experience would indicate that a majority of our existing local flood protection projects would not have been constructed, due to our sponsors' inability to finance their share of project costs.

COOPER LAKE AND CHANNELS, TEXAS

Mr. CHAPMAN. I think it would be fair to say there would not be a Cooper Lake, and even at 75, 25, the current policy, there wouldn't be a Cooper Lake, and I think the taxpayers are going to do well on that one, too.

I was very pleased to see that no funding is requested for Cooper Lake construction. The little—the way we have spun that is this is the first time since Dwight Eisenhower was President that there has not been funding, Mr. Chairman, for—this is a project that we thought was going to take on the status of Moses, and perhaps it did. But there is not—I don't think there is a single gentleman in the room that has had much contact with the Corps of Engineers and going all the way back to the Chief's Office and others—there are a long line of District Engineers and Division Chiefs and folks who have made it all the way through, have retired, probably have great grandchildren by now who may have great children that all have talked at some time in their life about Cooper Lake, and, Mr. Chairman, we finished it and it is quite an accomplishment, it is quite a work, and quite a tribute to this committee. And I say that long before I ever got here to this committee during your years here you have been supportive. My predecessor, Sam Hall, his predecessor, Wright Patman, have been coming before this committee for almost 50 years in support of the Cooper Lake project and we got it done.

Mr. MYERS. Yes.

Mr. CHAPMAN. It is finished, so, Colonel, I was pleased to see that and I also am pleased that you have gone forward on the erosion control project and to see that that shoreline control that is funded in the 1995 bill, is moving forward.

Is there anything that—I know Karen told me when I came in, you had mentioned that project. Is there anything—this may be the last time we ever make a record about Cooper Lake.

Colonel KING. Well, sir, the long and short of it is it is fully funded for completion. There are a number of project features that will be completed before September. Doctors Creek Park, as you are aware, will be completed this summer and South Sulphur Park by September. The Cooper perimeter wetlands are under design and they will be awarded in May, and the White Oak Mitigation Area feature of that park will be completed by September 1995, as well as the shoreline protection features. We are very pleased with all that, and appreciate the Committee's support.

BOWIE COUNTY LEVEE, TEXAS

Mr. CHAPMAN. We sure appreciate your good work on that.

In last year's appropriation bill, I understand the Corps—it was directed in last year's bill, the Corps is proceeding with detail design efforts to repair and rehabilitate the existing Bowie Levee. My understanding from a meeting that the Corps had recently with a local sponsor, is that an additional $900,000 would be necessary in fiscal year 1996 to complete the design effort; is that correct?

Colonel KING. Mr. Chapman, that number is too high. Our best estimates would be around $780,000 to do that.

Mr. CHAPMAN. Okay. I understand that a locally preferred option is being considered when developing the design alternatives and for the record, if you would, Colonel, please, can you outline your understanding of the cost-sharing requirements if that locally preferred option were to be pursued?

Colonel KING. Mr. Chapman, I have a few details about the proposal you are talking about. We don't have all the details yet, but in general, if the locally preferred plan is less expensive than the plan that maximizes economic benefits, what we normally call the NED, then the normal cost-sharing rules apply. If the locally preferred plan were to be more expensive than the most economic plan, then the local interest would have to pay 100 percent of the difference between the cost of that.

[CLERK'S NOTE.—Additional clarifying information was provided by Colonel King for the record as follows:]

In general, if the locally preferred plan is less expensive than the least costly alternative, then the normal cost-sharing rules apply. If the locally preferred plan were to be more expensive than the least costly alternative, then the local interest would have to pay 100 percent of the difference between the cost of their plan and the cost of the least costly alternative.

Colonel KING. I would have to say that we are going to look at that. I understand there is the proposal for the Interstate Highway that might have some bearing on that. Once we get more details, then we will have to fine-tune our analyses.

Mr. CHAPMAN. We would really appreciate your assistance in that because as we have visited in a previous meeting, there is a proposed new Interstate. In fact, not proposed, there is an authorized new Interstate Highway going across that river somewhere and there is some discussion about what is the most economic way to do that, and that is going to, I think, involve a levee system on the river, either the Federal or non-Federal portion of those levees, so if we could continue to work together on that?

Colonel KING. Yes, sir.

Mr. CHAPMAN. And we appreciate the assistance you have given us in that effort.

Mr. Chairman, quickly, I would yield to other Members but I don't see any.

Mr. MYERS. Use all the time.

Mr. CHAPMAN. I want you to know that I am sensitive to the five-minute rule——

Mr. MYERS. It doesn't apply this morning. Nobody is going to object. If the Colonel can stand it, I can.

Colonel KING. I can stand it, sir.

Mr. CHAPMAN. Mr. Chairman, I kindly appreciate that latitude.

Mr. MYERS. It is your day in the sun.

PAT MAYSE LAKE, TEXAS

Mr. CHAPMAN. Colonel, let me—last year your budget justifications didn't indicate any reductions in the program at Lake Pat Mayse and the full request of $750,000 was provided in the bill. However, in December this past year I received a letter informing me that the Lamar Point Park recreation area would be converted to a day use only due to budget constraints. After consultations with the Corps, overnight camping, although reduced in the amount of availability, would continue. However, the Corps has informed me that this would be up for review again in this fiscal year.

The fiscal year 1996 request for O&M at Lake Pat Mayse is $873,000. Again, there is no mention in the budget material of any proposed reduction in the services. Will the requested level of $873,000 maintain this project in its current status for fiscal year 1996?

Colonel KING. Yes, sir. I might add that the issue there at Pat Mayse was one of usage. We collected probably in the range of $300 last year in camping fees, and probably $1,100 in day use fees. The funds will be used, and we will continue to evaluate this during 1995.

Mr. CHAPMAN. Well, I think that is fair. If folks aren't going to camp, there is no sense spending money, but that was one of the things that—if you can keep us posted on that as your accounts proceed, why obviously we could review that. But that caught some of us off guard and you know how it is to get those kind of letters and phone calls from the folks at home.

Colonel KING. Yes, sir.

RED RIVER BASIN CHLORIDE CONTROL, TEXAS AND OKLAHOMA

Mr. CHAPMAN. On the Red River Chloride Control, I am aware that construction of the Red River Chloride Control project has been halted due to a supplemental Environmental Impact Statement that is being conducted, which is not scheduled for completion, as I understand it under the current schedule, until next February, a year away.

Colonel KING. Yes, sir.

Mr. CHAPMAN. Tell me as best you can what the delay of that would have, the impact of that on the schedule and cost of the project.

Colonel KING. Mr. Chairman, I guess it is good news and bad news. The good news is we don't have to budget for 1996 for Red River Chloride because we can take the $16 million that this Committee appropriated last year and carry that forward into 1996.

Having said that, there were some comments on the supplemental Environmental Impact Statement, or SEIS, at the Federal level, and also the Texas Parks and Wildlife Department and the Oklahoma State Department of Wildlife Conservation. They both questioned the impact of the project on the stripped bass inventory of Lake Texoma on the border, on the Red River. So what we have now is a very proactive effort between the Tulsa District working with the U.S. Fish and Wildlife Service and the two State agencies to respond to the draft Fish and Wildlife Coordination Act Report. They are trying to develop an adaptive management plan that would satisfy all the concerns, or most of the concerns anyway, of the various agencies involved, and develop a comprehensive plan to manage the lake with the project, and perhaps come up with some mitigation features for the project. But the long and the short of it is that this has delayed the total effort by about 16 months, which leads us to February of next year for completion of the supplemental EIS.

Mr. CHAPMAN. The budget justification basically takes the current year appropriation, basically saying that $14.4 million, would be a carryover from last year and that $5 million would be expended in 1996 with a carryover, the $9 million into 1997.

Is that $5 million—what basically—in the next fiscal year as this project proceeds, are you doing with that $5 million?

Colonel KING. The——

Mr. CHAPMAN. Is that the EIS, supplemental EIS?

Colonel KING. Part of it goes to the cost of developing the supplemental EIS but there are also some real estate issues and other things that are carrying forward.

Mr. CHAPMAN. From the standpoint of what you can be doing, i.e., the supplemental Environmental Impact Statement, does that $5 million represent your full capability on what can be done in the context of the delay you face?

Colonel KING. Yes, sir, it does.

[CLERK'S NOTE.—Colonel King provided additional clarifying information for the record as follows:]

Of the approximately $14 million unobligated Fiscal Year 1995 funds which will be carried into Fiscal Year 1996, about $5 million will be expended in Fiscal Year 1996. Thus, the project will continue with available funds and the official capability is $0. The remaining $9 million will be carried into Fiscal Year 1997. The Administration's position on capabilities is provided for the record.

[The information follows:]

QUALIFYING LANGUAGE FOR EXPRESSED APPROVED CAPABILITIES

Although project and study capabilities reflect the readiness of the work for accomplishment, they are in competition for available funds and manpower Army-wide. In this context, the Fiscal Year 1996 capability amounts shown consider each project or study by itself without reference to the rest of the program. However, it is emphasized that the total amount proposed for the Army's Civil Works Program in the President's budget for Fiscal Year 1996 is the appropriate amount consistent with the Administration's assessment of national priorities for Federal investments and the objectives of avoiding large budget deficits and the serious adverse effect that Government borrowing is having on the national economy. In addition, the total amount proposed for the Army's Civil Works Program in the President's Budget is the maximum that can be efficiently and effectively used. Therefore, while we could utilize additional funds on individual projects and studies, offsetting reductions would be required in order to maintain our overall budgetary objectives.

RED RIVER BASIN CHLORIDE CONTROL, TEXAS AND OKLAHOMA

Mr. CHAPMAN. If there would be an adoption of the new Corps policy, would that impact the Red River Chloride Control project?

Colonel KING. No, sir. That project is under construction and will continue.

Mr. CHAPMAN [presiding]. I have a few questions that—I have got to keep going now because the Chairman vanished. However, this might talk about—Chairman talking about my day in the sun, I could go down there and seize that gavel, I guess, since there is no one here to object. Isn't that what he said? If I move over there, would you call me Mr. Chairman just one time?

Colonel KING. Go for it.

GULF INTRACOASTAL WATERWAY-SARGENT BEACH, TEXAS

Mr. CHAPMAN. I would get in trouble probably. That camera would swing around. I have some questions I will submit on Lake of the Pines, basically on the status of the section 1135 project that is ongoing there. I don't think we need to discuss, and let me move quickly, if I can, to Sargent Beach.

The request for $20 million this year for Sargent Beach, does that represent full capability?

Colonel KING. Yes, sir, it does.

Mr. CHAPMAN. Of the Corps?

Colonel KING. Yes, sir.

Mr. CHAPMAN. There has been a lot of work done on this project. A lot of folks have keen interest, including the Corps, to see that it is completed in a timely manner to avoid a potential disaster that further erosion could cause in the intracoastal waterway.

The national benefits of the project have been clearly documented in our hearing record during the past several years. Would any of the new Corps proposed policies—for example, on beach erosion or flood control, as you think through that project, affect the ability of the Corps to move forward and complete—continue and complete this project?

Colonel KING. Mr. Chapman, no, sir. That was a 1995 new start. We have done a lot of work, preparatory work in real estate acquisition and some mooring facilities this year. We are scheduled to award a contract soon and start work down there. There will be ground breaking on the first of April. This project is under way, and will not be affected.

COLONIAS ALONG UNITED STATES-MEXICO BORDER

Mr. CHAPMAN. Great. The last two years, appropriation bills have included funding for the Corps' authorized program to assist with work on Colonias infrastructure along the U.S.-Mexico border.

Last year, at this time, you testified you were just getting under way on that effort. Can you give me basically a description of the current status of the Southwestern Division work in the Colonias activity?

Colonel KING. Yes, sir, Mr. Chapman, since testimony last year, working with the El Paso County Lower Valley Water District in El Paso, two Colonias have been identified for further study. Right now we are working with the local sponsor on that. These two in El Paso County are the first. Essentially, we will provide them technical assistance. So in summary, there has been work done. Two have been identified and we will continue to work with the authorities on that.

HOUSTON-GALVESTON NAVIGATION CHANNELS, TEXAS

Mr. CHAPMAN. Okay, and since I have been joined now by my colleague across the State line in Texas County, let me wrap up. I have got a couple questions I want to ask if I can about the Port of Houston. The fiscal year 1996 budget request provides $1.1 million for continued preconstruction engineering for the Houston-Galveston Navigation Channels project, is this full capability on that project?

Colonel KING. The budget request is the same as our capability, $1.1 million, yes, sir.

Mr. CHAPMAN. Now this I want to ask you, is there any unapproved capability on that project?

Colonel KING. No, sir.

Mr. CHAPMAN. The local sponsor of the Houston Ship Channel and Port of Houston Authority and channel users continue to be extremely interested in the schedule for this project. It is my understanding from the Corps' past testimony that the studies and reports can be completed in time to seek authorization of the project in 1996. Can you please submit for the record a time table for us of the remaining steps in preparation for the authorization of the Houston ship channel project?

Colonel KING. Yes, sir, be very glad to do that.

[The information follows:]

HOUSTON-GALVESTON NAVIGATION CHANNELS, TEXAS

Item	Date to be completed
Draft Supplemental Environmental Impact Statement to Environmental Protection Agency	12 May 1995.
Final Limited Reevaluation Report and Supplemental Environmental Impact Statement Completed	15 September 1995.

HOUSTON-GALVESTON NAVIGATION CHANNELS, TEXAS—Continued

Item	Date to be completed
Higher Authority Approves Report/Chief's Report forwarded to Assistant Secretary to the Army for Civil Works.	15 June 1996.
Assistant Secretary to the Army for Civil Works Recommends Report to the Office of Management and Budget.	1 July 1996.

HOUSTON-GALVESTON NAVIGATION CHANNELS, TEXAS

Colonel KING. And I just might add as a footnote that Tom Kornegay in the Port of Houston Authorities, our great partner down there, has been working closely with the Galveston District. We are clearly committed, and on schedule for a Fiscal Year 1996 authorization. Actually, we are one day ahead of schedule. They keep reminding me, we are one day ahead of schedule. So, we are on schedule with that project.

Mr. CHAPMAN. And is there anything in the proposed policy changes that would impact Corps activity that you can see in this project?

Colonel KING. Sir. It is a navigation project. It is not flood control, so I don't really see any impact.

Mr. CHAPMAN. Mr. Chairman, are you going to leave again?

Mr. MYERS [presiding]. Yes. We have got to make a quorum next door. Will you filibuster?

Mr. CHAPMAN. I am going to adjourn the committee and bring some coffee in here and cookies and——

Mr. MYERS. What is the procedure for impeachment?

Mr. CHAPMAN. Would you like me to proceed because I am about through?

Mr. MYERS. Could you stick around for conclusion of the North Pacific Division? I would like to ask you two or three questions. Maybe Jim has already asked them. I am sorry for the interruption here but—we will go make a quorum next door.

Mr. CHAPMAN [presiding]. I am not on that committee.

I have got some other questions, Colonel, I will submit for the record and we can go ahead and get started. We had hoped, if the schedule permitted, that we could perhaps visit, and I don't know what the Chairman's questions will be—I will negotiate with him, this hanging around thing he was talking about, see if we can break loose maybe or see if we can sit back here and visit. But with that, let me thank you so much for your help, and not just for the First District, but all over the great State of Texas. I wish you the very best in your retirement—where are you going to retire?

Colonel KING. Texas, I hope.

Mr. CHAPMAN. Good for you. Let's hope it is in an area where the Corps has done the work and it doesn't get flooded. So the new policy takes effect, you may have to be out there filling sandbags or something. Maybe you are on the high ground.

Colonel KING. I may be in great demand as a consultant.

Mr. CHAPMAN. You probably hope so.

Anyway, I appreciate your good work and you have got able folks, as you are well aware, with you and we appreciate their help and cooperation as well.

Colonel KING. Yes, sir.

Mr. CHAPMAN. And since I would ask the Chairman for permission to submit additional questions for the record, but since he is not here, I will tell you that we will be submitting additional questions for the record.

Appreciate your cooperation on that and, Mr. Chairman, I have no further questions. If you have got a couple, I yield back.

[The information follows:]

CORPS NEW POLICY PROPOSAL

Mr. CHAPMAN. Col. King, your testimony provides a picture of why I disagree with the Corps proposed policy of only doing flood control for projects of national significance-- with national significance being defined only for interstate not intrastate waters.

You outline six projects in the Dallas area alone that cost the Corps $487 million (including all construction and operation and maintenance) and prevented $5.3 Billion in damages in just FY 94 and $17 Billion over the life of the projects.

Would any of these six projects meet the proposed test of national significance?

Colonel KING. Sir, these projects are in the Trinity River Basin, which is wholly contained within the State of Texas; therefore, they would not meet the proposed test of national significance.

Mr. CHAPMAN. What would the impact of the new Corps proposed policy for flood control have on the Southwestern Division?

Colonel KING. Sir, the vast majority of flood damages experienced within the Southwestern Division result from intrastate waters. After completion of current phases of ongoing projects, our role in flood damage reduction in this region will diminish substantially. Exceptions would include continued operation of our flood control projects on interstate streams and reservoirs with hydroelectric power or navigation as a purpose along with flood control.

FUTURE IMPACTS

Mr. CHAPMAN. Please outline the long-term future impact, but also provide for the record the current ongoing studies, investigations, engineering, and construction projects that would be impacted.

Colonel KING. Sir, the list of Fiscal Year 1996 ongoing studies, investigations, engineering and construction projects which will be impacted by the new policies will be provided for the record.

[The information follows:]

GENERAL INVESTIGATIONS

RECONNAISSANCE PHASE STUDIES
- Southwest Arkansas Study, Arkansas
- Oak Creek, Florence, Colorado
- Alpine, Texas
- Buffalo Bayou and Tributaries, Texas
- Galveston Beach Erosion, Texas
- Guadalupe and San Antonio Rivers, Texas
- Lower Brazos River, Texas
- Middle Brazos River, Texas

RECONNAISSANCE PHASE STUDIES (Continued)
- Northwest El Paso, Texas
- Waller Creek, Austin, Texas

FEASIBILITY PHASE STUDIES
- Arkansas River, Tucker Creek, Arkansas
- Manitou Springs, Colorado
- Rocky Arroyo/Dark Canyon, Pecos River and Tributaries, New Mexico
- Bird Creek Basin, Oklahoma
- Buffalo Bayou and Tributaries, Addicks and Barker Reservoirs, Texas
- Plainview, Brazos River Basin, Texas

PRECONSTRUCTION, ENGINEERING AND DESIGN PHASE PROJECTS
- Graham, Brazos River Basin, Texas
- Raymondville Drain, Texas

CONSTRUCTION, GENERAL

Shoal Creek, Austin, Texas

LONG TERM FUTURE IMPACTS

The long-term future impact, in addition to the studies and projects listed above, would include the possible termination of ongoing studies and projects after completion of the applicable following phase. A list of these studies and projects will be provided for the record.

[The information follows:]

GENERAL INVESTIGATIONS

FEASIBILITY PHASE STUDIES
- May Branch, Fort Smith, Arkansas
- Espanola Valley, Rio Grande and Tributaries, New Mexico
- Pecan Bayou, Brownwood, Texas
- Upper Trinity River Basin, Texas

PRECONSTRUCTION, ENGINEERING AND DESIGN PHASE PROJECTS
- Arkansas City, Kansas
- Winfield, Kansas
- Las Cruces, El Paso and Vicinity, New Mexico
- Brays Bayou, Houston, Texas
- Cypress Creek, Houston, Texas
- Dallas Floodway Extension, Trinity River Project, Texas
- Greens Bayou, Houston, Texas
- South Main Channel, Texas

POSSIBLE NON-FEDERAL FLOOD CONTROL OPERATION AND MAINTENANCE

Also, the following preliminary list of Corps-operated projects could possibly be transferred to non-Federal entities will be provided for the record.

[The information follows:]

STATE

- Arkansas
  - Blue Mountain Lake
  - Nimrod Lake
- Colorado
  - John Martin Reservoir
  - Trinidad Lake
- Kansas
  - Council Grove Lake
  - El Dorado Lake
  - Elk City Lake
  - Fall River Lake
  - Marion Lake
  - Pearson-Skubitz Big Hill Lake
  - Toronto Lake
- New Mexico
  - Conchas Lake
  - Santa Rosa Dam and Lake
  - Two Rivers Dam
- Oklahoma
  - Arcadia Lake
  - Birch Lake
  - Candy Lake
  - Canton Lake
  - Fort Supply Lake
  - Great Salt Plains Lake
  - Heyburn Lake
  - Optima Lake
  - Sardis Lake
  - Waurika Lake
- Texas
  - Aquilla Lake
  - Bardwell Lake
  - Belton Lake
  - Benbrook Lake
  - Buffalo Bayou and Tributaries
  - Canyon Lake
  - Granger Dam and Lake
  - Grapevine Lake
  - Hords Creek Lake
  - Joe Pool Lake
  - Lake Kemp
  - Lavon Lake
  - Lewisville Dam

STATE

Texas (Continued)
- Navarro Mills Lake
- North San Gabriel Dam and Lake Georgetown
- O. C. Fisher Dam and Lake
- Proctor Lake
- Ray Roberts Lake
- Somerville Lake
- Stillhouse Hollow Dam
- Waco Lake
- Wallisville Lake

POSSIBLE NON-FEDERAL SHALLOW DRAFT HARBORS OPERATION AND MAINTENANCE

The list of Federally maintained shallow draft harbors which would possibly be transferred to non-Federal entities will be provided for the record.

[The information follows:]

Texas
- Cedar Bayou
- Clear Creek and Lake
- Double Bayou
- Little Bay
- Oyster Creek
- Trinity River

CORPS NEW POLICY PROPOSAL

Mr. CHAPMAN. To your knowledge, have any in-depth analyses been done on the newly proposed policies?

Colonel KING. Sir, I am not aware of any such in-depth analyses.

Mr. CHAPMAN. Have you been given any direction regarding how to address local sponsors agreements and funding that has already been spent for projects that would not be continued due to any of the newly proposed Corps policies?

Colonel KING. No, sir, we have not.

Mr. CHAPMAN. Should the proposed cost-sharing policy be approved by the Congress, what will happen to the cost-sharing arrangements on projects currently underway?

Colonel KING. Sir, although specific Headquarters guidance has not been received, it is understood that current project phases would be completed.

COOPER LAKE, TEXAS

Mr. CHAPMAN. It is my understanding that community officials have inquired about the ability to obtain lands at Cooper Lake for an economic development project they are pursuing. Under what type of arrangements can lands be made available for this purpose?

Colonel KING. Sir, certain types of facilities may be constructed by the state or third parties on recreation lands and may be operated by the state or third parties on a concession basis. These facilities include but are not necessarily limited to restaurants, lodges, golf courses, cabins, vacation-type structures, stables, marinas and similar revenue producing facilities compatible with existing project purposes.

The existing park and recreation lease and contracts with the state specifically provide for sublease agreements with the approval of the Contracting Officer. Typically, commercial concessions, such as those described, are contracted on a competitive basis.

Mr. CHAPMAN. Would additional mitigation lands be required under such an agreement?

Colonel KING. Sir, provided such facilities are built on park lands, no additional mitigation land would be required.

Mr. CHAPMAN. What types of costs would be associated with providing lands for economic development activities and who would be responsible for those costs?

Colonel KING. Sir, the recreation lands are under lease to the State and costs associated with any further development would be the responsibility of the State or the concessionaire.

COOPER LAKE AND CHANNELS, TEXAS
OPERATION AND MAINTENANCE, GENERAL

Mr. CHAPMAN. I am pleased that your shoreline erosion control activities funded in the FY 95 bill are on schedule. It is my understanding that the Corps will be holding a public meeting on the plans for this erosion control work to ensure the designs are consistent with the community desires to use the lake to attract economic development to the surrounding area. I appreciate the Corps taking this step and look forward to the completion of this work.

Colonel KING. Sir, it is our intention to meet with Texas Parks and Wildlife Department and local community officials to discuss the alternatives available to them to determine the most feasible and preferred plan.

BOWIE COUNTY LEVEE, TEXAS

Mr. CHAPMAN. I understand a "locally preferred option" is being taken into consideration when developing the design alternatives. For the record, please outline your understanding of the cost-sharing requirements should this option be pursued.

Colonel KING. Sir, the locally preferred option is one alternative that will be considered during the design of this project. Pursuant to the cost sharing requirements of the Water Resources Development Act of 1986, any increase in costs associated with implementation of the locally preferred option as compared to the least costly alternative would be the responsibility of the local sponsor. The least costly alternative would be developed as directed in the Fiscal Year 1995 Energy and Water Development Appropriations Conference Report, 103-672, 4 August 1994.

Mr. CHAPMAN. For the record, please provide your current preliminary cost estimates and schedule for this project.

Colonel KING. Sir, our preliminary estimate for the detailed design effort is approximately $1,380,000 and will take approximately two years to complete. Costs and schedule estimates associated with actual project construction are not known at this time as they are dependent on the design alternative that is selected for construction.

Mr. CHAPMAN. For the record, please clarify the steps that would be necessary to grandfather the cost-sharing requirements of this project as outlined in its original authorization.

Colonel KING. Sir, specific project legislation superseding the cost sharing requirements set forth by the Water Resources Development Act of 1986 would be required to cost share this project as outlined in its original authorization.

PAT MAYSE LAKE, TEXAS

Mr. CHAPMAN. What does the description "Increase operational activities of recreation facilities and oversight of real estate activities in FY 96" listed in the budget material for Lake Pat Mayse mean?

Colonel KING. Sir, the increase for operational activities is due to increased real estate compliance inspections for leases of Federal lands and an increase to the project of returned recreation user fees from all parks at Pat Mayse Lake.

FERRELLS BRIDGE DAM
LAKE O' THE PINES, TEXAS
SECTION 1135

Mr. CHAPMAN. For the record, please provide the status of the Section 1135 project ongoing at this project.

Colonel KING. Sir, the plans and specifications for the Lake O' the Pines, Section 1135, project have been completed. Upon final execution of the Project Cooperation Agreement, scheduled for early March 1995, we will begin the final phase of implementing the project.

Mr. CHAPMAN. Are any additional funds required to proceed with this 1135 project?

Colonel KING. Yes, sir. Funds in the amount of $47,000 will be required, which includes $29,100 in Federal funds from the Section 1135 Continuing Authority Program and total contributions in the amount of $17,900 from the Texas Parks and Wildlife Department.

Mr. CHAPMAN. What is the status of the local sponsor agreements on this 1135 project?

Colonel KING. Sir, Texas Parks and Wildlife Department representatives have informally notified the Corps that the Project Cooperation Agreement was signed by their director on February 15, 1995. They have forwarded it to the Fort Worth District for final execution by the District Engineer.

FERRELLS BRIDGE DAM
LAKE O' THE PINES, TEXAS
OPERATION AND MAINTENANCE

Mr. CHAPMAN. Last year, additional Operation and Maintenance funds were provided for the Lake O' The Pines project to fix roads surrounding the project that were damaged due to floods. What is the status of this work?

Colonel KING. Sir, the road repair is underway and scheduled for completion in June 1995.

Mr. CHAPMAN. Is the current O&M request of $2.13 million adequate to meet the full O&M needs of this project?

Colonel KING. Sir, the President's budget amount of $2.13 million is adequate to meet the Operations and Maintenance needs of this project.

GULF INTRACOASTAL WATERWAY
SARGENT BEACH, TEXAS

Mr. CHAPMAN. For the record, please provide the current schedule for this project.

Colonel KING. Sir, the project is currently under construction. Two mooring facilities are on schedule to be completed in May 1995, and an 8-mile revetment contract, the last feature to be constructed, is scheduled to be awarded in April 1995.

COLONIAS, TEXAS

Mr. CHAPMAN. Has either the State of Texas or local jurisdictions contacted the Corps for providing assistance under this authority?

Colonel KING. Sir, the State of Texas Water Development Board, El Paso Water Utilities Public Service Board, and El Paso County Lower Valley District Authority have requested that the Corps provide technical assistance under the Section 219 authority for two potential projects.

Mr. CHAPMAN. Do any of the new proposed Corps policies impact your ability to carry out this authorized program?

Colonel KING. Sir, this is a special program authorizing technical assistance for the design of water and wastewater treatment facilities. Since it is not flood control, the new policies will not affect the program.

WRIGHT PATMAN DAM AND LAKE, TEXAS

Mr. CHAPMAN. Is the requested O&M funding, $2.326 million, for Wright Patman Lake the full capability for FY 96?

Colonel KING. Sir, in addition to the budgeted amount, there is an approved capability in the amount of $1.05 million to replace an emergency spillway bridge, repair embankment toe drains, and install new piezometers.

Mr. CHAPMAN. Will this funding level maintain the project and the surrounding parks at its current status?

Colonel KING. Yes, sir. The President's budget amount of $2.326 million will maintain the project and the surrounding parks at their current status.

WALLISVILLE LAKE, TEXAS

Mr. CHAPMAN. What is the current status of the Wallisville project?

Colonel KING. Sir, since resuming construction in 1991, the west non-overflow levee has been completed and the east non-overflow levee has been rehabilitated. A contract for design of the lock structure rehabilitation and design of the administration building was awarded to an Architect/Engineer contractor and is scheduled for completion in April 1995. Design of the gated spillway, access bridge and south non-overflow levee will be completed in June 1995. Design of the control structures and the recreation facilities is ongoing and the master plan for the project has been initiated.

Mr. CHAPMAN. When is the scheduled completion date for Wallisville?

Colonel KING. Sir, the completion date for the project is being determined.

Mr. CHAPMAN. What is the Corps of Engineers capability (approved/unapproved) for FY 96?

Colonel KING. Sir, the approved capability for Fiscal Year 1996 is $5,000,000. However, the Administration's review of this project has identified economic and policy concerns.

Mr. CHAPMAN. Does the Corps' expressed capability for FY 1996 significantly effect prior construction schedules that have been furnished the local sponsors?

Colonel KING. Sir. A construction award for the gated spillway, access bridge, lock structure rehabilitation, and administration building had originally been scheduled for July 1995. Approval of the capability amount of $5 million would allow this contract to be awarded in early Fiscal Year 1996.

Mr. CHAPMAN. What does it do to your completion schedule?

Colonel KING. Sir. A completion date for the Wallisville Lake project has not been determined.

Mr. CHAPMAN. If the expressed capability is not funded, would it be necessary to stop the project?

Colonel KING. Sir, if the capability is not funded, we would be unable to proceed with advertising and awarding any additional construction contracts. The project would be stopped until such time that additional funding is made available.

Mr. CHAPMAN. If so, what would it cost?

Colonel KING. Sir, if the project was not funded in Fiscal Year 1996, the project would be stopped for a minimum of one year. The cost of this delay would amount to the escalation in costs of the uncompleted work, approximately $100,000 per month.

Should the project be stopped permanently, several project features would have to be removed, including two salt water skimmers and the six miles of concrete low overflow dam. The sector gates and lock facilities would have to be removed and scrapped and the project lands placed into a caretaker status. This cost would be in the millions of dollars; however, a cost estimate for a total stoppage is not available at this time.

HOUSTON-GALVESTON NAVIGATION CHANNELS, TEXAS

Mr. CHAPMAN. The local sponsor of the Houston Ship Channel the Port of Houston Authority (PHA) and channel users continue to be extremely interested in the schedule for this project. It is my understanding from the Corps past testimony that the studies and reports can be completed in time to seek authorization of the project in 1996. Please submit for the record a timetable of the remaining steps in preparation for the authorization of the HSC project.

Colonel KING. Sir, the remaining steps in preparation for authorizations would include submitting the draft Supplemental Environmental Impact Statement, SEIS, to the Environmental Protection Agency in May 1995. The final Limited Reevaluation Report and SEIS will be completed by September 1995. Higher Authority approval and forwarding of this report to the Assistant Secretary of the Army for Civil Works is anticipated in June 1996. The Assistant Secretary of the Army for Civil Works should recommend report approval to Office of Management and Budget in July 1996.

Mr. CHAPMAN. What assurances can the Corps provide that they will adhere to this schedule?

Colonel KING. Sir, the U. S. Army Corps of Engineers, along with the local sponsors, are committed to completing everything necessary to assure that the project is eligible for authorization in 1996. The timetable presented in the previous question assures that authorization could occur in 1996.

NEW STARTS

Mr. CHAPMAN. For the record, please provide a list of new starts for General Investigation and Construction that the Southwestern Division sent to the Chief of Engineers and OMB for funding in FY 96.

Colonel KING. Yes, sir. The list of new starts for General Investigation and Construction that the Southwestern Division recommended will be provided for the record.

[The information follows:]

NEW STARTS - GENERAL INVESTIGATION

STUDY

Alpine, Texas
Buffalo Bayou and Tributaries, Texas
Cimarron River and Tributaries, New Mexico, Oklahoma, Colorado and Kansas
Galveston Beach Erosion, Texas
Grand/Neosho River Watershed, Oklahoma, Kansas, Missouri, and Arkansas *

STUDY (Continued)

Guadalupe and San Antonio Rivers, Texas
Gulf Intracoastal Waterway - Port O'Conner to Corpus Christi Bay, Texas
Lower Brazos River, Texas
Middle Brazos River, Texas
Northwest El Paso, Texas
Oak Creek, Florence, Colorado
Optima Lake, Oklahoma
Rio Puerco Watershed, New Mexico *
Southwest Arkansas Study, Arkansas
Waller Creek, Austin, Texas
White River Watershed, Arkansas and Missouri *

NEW STARTS - CONSTRUCTION, GENERAL

Projects

Abiquiu Dam Emergency Gates, New Mexico
McClellan-Kerr Arkansas River Navigation System, Lock and Dams, Arkansas and Oklahoma (Montgomery Point Lock and Dam)*
Shoal Creek, Austin, Texas

*Not recommended to OMB

CONTINUING AUTHORITIES PROGRAM

Mr. CHAPMAN. For the record, please provide a list of the projects the Southwestern Division of the Corps is currently conducting under the continuing authorities program.

Colonel KING. Sir, a list of all active studies and projects under the Continuing Authorities Program in the Southwestern Division will be provided for the record.

[The information follows:]

CONTINUING AUTHORITIES PROGRAM AND SECTION 1135
LIST OF STUDIES AND PROJECTS IN THE SOUTHWESTERN DIVISION

DISTRICT	AUTHORITY SECTION	PROJECT NAME
ALBUQUERQUE	14	Camino Alire, Santa Fe River, Santa Fe, NM
	14	Hwy 62 Bridge, Santa Fe, NM
	14	Hwy 75, Embudo, Rio Arriba, NM
	14	Hwy 194, Bent's Old Fort, Arkansas River, La Junta, CO
	14	Pump Station, Rio Fernando De Taos, Taos, NM
	14	San Isidro Road, Santa Fe, NM
	14	Southern Boulevard, Black's Arroyo, Rio Rancho, NM
	14	State Road 12, Stark Weather River, Reserve, NM
	14	State Road 44, Rio Salado, San Ysidro, NM
	14	Madrid Fire Station, Madrid Arroyo, NM
	205	Little Puerco River, Gallup, NM
	205	Zuni River, NM
	1135	Lake Hasty Habitat Restoration, NM
FORT WORTH	14	Bear Creek, County Rd 485, Collin County, TX
	14	Dudley Branch, Hebron Parkway, TX
	14	Furneaux Creek, Carrollton, TX
	14	Mary's Creek Bridge, Fort Worth, TX
	14	Roaring Springs Road, Indian Creek, TX
	14	Washington on the Brazos State Park, TX
	205	Browders Creek, Springtown, TX
	205	Calloway Branch, Richland Hills, TX
	205	Delaware Creek, Irving, TX
	205	Dry Branch, Grand Prairie, TX
	205	Duck Creek, Garland, TX
	205	Farmers Branch, White Settlement, TX

DISTRICT	AUTHORITY SECTION	PROJECT NAME
FORT WORTH (Continued)	205	Greentree Subdivision, Midland Draw, Midland, TX
	205	Johnson Creek, Arlington, TX
	205	Johnson Creek, Grand Prairie, TX
	205	Oak Street Bridge, Midland Draw, Midland, TX
	205	Perry Road, Hutton Branch, Carrollton, TX
	205	Polecat Creek, LaCoste, TX
	205	Midland/Jal Draw, Midland, TX
	205	Rush Creek, Arlington, TX
	205	Singing Hills Creek, Watauga, TX
	205	South Polecat Creek, LaCoste, TX
	205	Sulphur Branch, Euless, TX
	205	Ten Mile Creek, DeSoto, TX
	205	Ten Mile Creek, Lancaster, TX
	205	Upper Zacate Creek, Laredo, TX
	1135	Big Cypress Bayou Below Lake O' the Pines, TX
	1135	Ferrells Bridge Dam, Lake O' the Pines, TX
	1135	Proctor Lake Restoration Project
	1135	Wright Patman, Waterfowl Habitat Restoration, TX
GALVESTON	14	Buffalo Bayou, Piney Point Village, TX
	107	Cedar Bayou Navigation, TX
	205	Buffalo Bayou, Lynchburg Pump Station, Houston, TX
	205	Liberty Levee, Liberty, TX
	205	Guadalupe River, Victoria, TX
	1135	Barker Reservoir Waterfowl Habitat Restoration Project, TX
	1135	Salt Bayou, McFadden Ranch Wetlands, TX
	1135	Laguna Madre Seagrass Restoration Project, TX
LITTLE ROCK	14	Current River, Highway 211, Clay County, AR
	14	Sewage Lagoons, Little Red River, Judsonia, AR
	205	Black River, Poplar Bluff, MO
	205	Caney Bayou, Jefferson County, AR
	205	Cato Spring, Fayetteville, AR
	205	Dry Jordan Creek, Harrison, AR

DISTRICT	AUTHORITY SECTION	PROJECT NAME
LITTLE ROCK	205	Crooked Creek, Harrison, AR
(Continued)	205	Mill Creek, Fort Smith, AR
	205	White River, Batesville, AR
	205	White River, Jackson County, Levee Number 2, Jacksonport, AR
TULSA	14	Arkansas River, Sand Springs, OK
	14	Bridge, Walnut River, Cowley County, KS
	14	City Dam, Fall River, Neodesha, KS
	14	City Dam, Little Caney River, Caney, KS
	14	County Road and Bridge, Arkansas River, Ralston, OK
	14	Kiowa Tribe Housing Development, Anadarko, OK
	14	Lagoon, Chikaskia River, Fort Oakland, OK
	14	Lagoon, Washita River, Alex, OK
	14	Levee, Arkansas River, Tulsa, OK
	205	Coody Creek and Tributaries, Muskogee, OK
	205	East Boomer Creek, Stillwater, OK
	205	Liberal, KS
	205	Plum Creek, Wichita Falls, TX
	205	Wolf Creek, Lawton, OK
	1135	El Dorado Fish Habitat Restoration, KS
	1135	Grand Lake Restoration Project, OK
	1135	Tenkiller Lake Restoration Project, OK
	1135	Wichita Valley Flood Control Center, KS

LAVON LAKE, TEXAS

Mr. CHAPMAN. Lavon Lake, located on the East Fork of the Trinity River, has flood control as a primary purpose. In May of 1990, the lake reached its highest level in history with maximum releases being let through the dam. This situation resulted in extensive damage to the Cottonbelt (Southern Pacific) railroad line bridge downstream from the Lake. Due to this damage, the rail line has been abandoned and sold and places in jeopardy maintaining this right-of-way for rail. This line is the economic lifeblood to many East Texas communities in my congressional district who are dependent upon this line for rail transportation.

Did the Corps include in their damage assessment for this 1990 flood any impacts due to the loss of this bridge?

Colonel KING. No, sir. The damage assessment the Corps provided concentrated on facilities associated with the dam itself; such as, spillway and roadways, and Federally constructed facilities above the dam.

Mr. CHAPMAN. Is the Corps aware of the potential negative economic impact this flood damage will cause to the areas serviced by this line?

Colonel KING. No, sir. We did not study the economic impact on the areas serviced by this line.

Mr. MYERS. Well, thank you, Mr. Chapman, and I apologize for the skating back and forth. I am getting roller skates to go from one committee to the other. Given the rescissions bill and hearings trying to make a quorum so we can function, why, it is rather difficult.

INTRODUCTION OF CONGRESSMAN SKELTON QUESTIONS

Mr. CHAPMAN. Mr. Chairman, I have one omission. Mr. Bevill, on behalf of Mr. Skelton, was going to submit some questions for Colonel King on some issues and with the Chair's permission, I will just submit those for the record and ask the Colonel to answer those as well.

Mr. MYERS. A number of us will have questions for the record so we appreciate your cooperation.

Colonel KING. Yes, sir.

[The information follows:]

QUESTIONS FOR THE RECORD FROM MR. SKELTON

HYDROPOWER PROJECTS

Question. Do you believe that your division has sufficient funds to maintain your high record of reliability and preserve the projects' capacity?

Answer. Yes, sufficient funds are available to maintain our reliability and preserve the projects capacity.

Question. Can you assure us that the budget funds requested and appropriated will be truly used at the projects for the maintenance of the hydropower facilities?

Answer. Funds will be used as requested unless emergency situations arise which require reprogramming of some funds within the hydropower project itself, or to other projects. Emergency situations may include replacement of a failed generator, turbine, or transmission line terminal equipment.

Question. Due to the concerns with low levels of dissolved oxygen in the water released from Table Rock and Bull Shoals dams, the Corps has limited power production at these projects costing ratepayers in Missouri alone over $3,000,000 during the last four years. Since injecting oxygen into the water worked well at Table Rock dam, and it is an acceptable economic solution to preserving hydroelectric capacity, why can't we establish this practice at Bull Shoals and other projects as a short term solution?

Answer. The injection system at Table Rock Dam is not a complete solution to the problem, and has been determined to be an ineffective means of oxygenating water. This system was installed as a part of a prototype test back in the seventies and, at that time, cost sharing was not required for such tests. Today, this same system would require a cost sharing sponsor.

Question. As a long term solution, look at the upstream watersheds where low dissolved oxygen and other water quality problems appear to originate.

Answer. As directed by Congress, we are conducting an analysis of the upstream watershed at Beaver Lake in Arkansas. This Water Quality Enhancement project consists of incorporating Best Management Practices on farms located upstream from the lake. This work is being administered by the National Resources Conservation Service. The Corps is administering a contract to monitor the quality of water that is flowing into Beaver Lake. The final results of this project will not be known for several years. Also, we have recently received approval from Higher Authority to pursue opportunities for ecosystem restoration and development of comprehensive water quality management plans for the White River and Illinois River Basins in Arkansas and Oklahoma. We are currently evaluating the opportunity to initiate the appropriate studies for these two basins. These studies would be conducted under standing authorities.

Question. Do you need funding for this?

Answer. The Beaver Lake Water Quality Enhancement project is fully funded. Funding of studies on the White River and Illinois River Basins would be requested through the standard budgetary process.

HYDROPOWER CONTRACTS

Question. The Corps has been requiring generation schedules a day in advance and has encouraged the utilities to strictly adhere to these schedules. Since this practice takes away the utilities' flexibility to respond to changing load conditions and to conserve the resource if it is not needed, how will the Corps provide compensation for this loss in scheduling benefits to the utilities?

Answer. The U.S. Army Corps of Engineers is following the terms specified in the contracts between the Southwestern Power Administration and the utilities.

Question. What revenues or other benefits is the federal government expecting to receive that would offset the cost of this compensation?

Answer. The Federal Government is delivering hydropower to the various utility companies based on conditions of their contracts; therefore, no additional benefits are anticipated.

NEW POLICY CRITERIA

Mr. MYERS. In a colloquy you had with Mr. Chapman, who has more of an interest of course, a more direct interest than any of the rest on the committee, but Dallas has experienced in recent years a lot of severe floods, as well as some of the other areas in your jurisdiction. I think in the colloquy you had with Mr. Chapman, Dallas would be a problem under the new criteria that has been established by this administration, would they not?

The floods they have suffered fall within the State of Texas and would not meet the 50 percent criteria, if they can meet the other two, so it would seem that that would present a real problem.

Does the city of Dallas, are they aware of the impending threat that they have now, that they won't get their protection completed?

Colonel KING. Mr. Chairman, I don't know if they know in great detail yet. In a previous response, I indicated that the word is filtering out. I met with the Red River Valley Association last week. It was sort of news when General Witherspoon and I explained the new policies.

Certainly in our area, the North Central Texas Council of Governments has come up on the net in our area because they are our local sponsors with the Upper Trinity River Basin study. With the $304,000 in this year's budget, we are scheduled to complete that feasibility study. It is going to be a challenge to the Council on how to proceed once we wrap that study up and give it to them.

CARRYOVER FUNDS

Mr. MYERS. It is a real problem for every community——

Colonel KING. Yes, sir.

Mr. MYERS [continuing]. Who have expected in good faith to have some help from the Corps and from the Federal Government. They are going to have the rug jerked out from underneath them if this should come about.

If you were here yesterday, you understand there may be a lot of questions about that, but I am not about to predict what this Congress might do or the next Congress. It seemed like you had a rather large carryover on a number of projects there. Why was this big carryover?

Colonel KING. There were a number of contributing factors that just add up to the sum. The problem we had with the Red River Chloride Control project supplemental EIS was unexpected. Other times, our estimates have proven too optimistic. I don't think there has been anything startlingly new this year, just that we are more focused and much more sensitive to avoiding the carryover. I think in the past, maybe a little self-criticism, we have become used to the ability to carry forward, if in fact we did not execute for any number of a thousand different reasons, work with local sponsors, working through permit issues, working through all the rubric it takes to bring a project to fruition.

Most of the divisions, I know mine in particular, have instituted a very stringent review and analysis process. We are committed to not ask for any funds that we cannot execute in a year. There is a little bit of a paradigm shift, a little bit of a cultural change in the Corps.

We have always used the money to good effect, just not always at that precise Fiscal Year. Maybe it carried over a little bit. We are really trying to work with the committee and the Congress to avoid that in the future. It is a very diligent effort throughout the Corps to do that.

Mr. MYERS. Well, from the divisions we have had so far, all have had a huge carryover. It kind of looks like we, you and us both, are not doing our job very well if we had so many carryovers in so many projects. In seems like in every project there has been a carryover last year, and I didn't know whether you were being directed to drag your feet and not obligate.

Are you getting direction from the OMB or somebody else that tells you that—or maybe at your level you don't hear that. Maybe the Chief—do you get directions from on top—the gentleman is shaking his head no. That kind of worries me because it seems a consistent pattern of carryovers.

Colonel KING. I do not know which way—General Genega was shaking his head. We do get guidance, but General Genega is an individual and professional, and certainly with Dr. Zirschky is committed to cutting down our large carryover. Part of it is the differences between the civil works program and the military program. Even though I had a healthy civil works program in 1994, my military program was 74 percent of my total work load, and civil works was only 26 percent in relative terms.

Those customers we have, if you will, on the military side are very demanding. They don't get carryover, so there has always been culturally a focus on execution, timely execution of a military mission, not so much on the civil. It was not anybody's fault that we did have that luxury of carryover, but we just think they both ought to operate the same now. We are working with our Headquarters to reduce those anomalies.

Mr. MYERS. It is not a bad thing to have carryover, I guess, but it just seemed like a pattern that we have discovered here and I think it is something we have to watch. We just haven't had that luxury available, money that we can carryover there. Might be some other high priority items that we should be funding and wait for future years if that is going to be a pattern in the future.

Colonel KING. It is just part of our helping to tighten the budget, tightening the belt on the Federal budget.

WORK FOR OTHERS

Mr. MYERS. Do you have much work to do for others?

Colonel KING. Yes, sir, we do.

Mr. MYERS. Would you provide for the record work done for others? I don't think you have provided it at this point, have you?

Colonel KING. I would be glad to submit it.

Mr. MYERS. If you would, please, provide it for the record.

[The information follows:]

WORK FOR OTHERS

Agency	Amount ($000)	Description of the Work
FEDERAL		
Department of Agriculture	30	Cultural resource surveys; and environmental investigation and restoration.
Department of Energy	100,450	Flood studies, real estate acquisition, engineering support and environmental restoration of facilities.
Environmental Protection Agency	44,925	Technical support, design, contract procurement, and real estate acquisition and relocation at EPA Superfund sites.
Federal Emergency Management Agency	4,264	Flood insurance studies; design reviews and construction management for environmental remediations at emergency broadcasting stations.
General Services Administration	93	Environmental assessments and remediations of storage tanks.
Department of Housing and Urban Development	238	Inspection, construction management, and lead-based paint testing of public and military housing.
International Boundary and Water Commission	1,030	Channelization improvement study of the Rio Grande.
Department of Interior	1,983	Environmental investigations and assessments; bridge design and construction.
Department of Justice	21,637	Environmental restoration; design and construction management of facilities for various agencies.
National Air and Space Administration	31	Construction management of data interface facility.

Agency	Amount ($000)	Description of the Work
Department of Transportation	15,417	Environmental assessments; waterways dredging; design and construction management of facilities.
Department of Treasury	2,594	Construction of security maintenance facility.
SUBTOTAL, FEDERAL AGENCIES	192,692	
STATE AGENCIES	19,709	Hydropower and bridge construction.
GRAND TOTAL	$212,401	

COOPER LAKE AND CHANNELS, TEXAS

Mr. MYERS. Cooper Lake. Mr. Chapman spoke about Cooper Lake and it has been before this committee about as long as I have been on the Committee. I have flown over it. I haven't visited the site at this point. Haven't been invited.

Mr. CHAPMAN. What are you doing this weekend?

Mr. MYERS. But there will be two recreation areas at Cooper Lake; is that correct, the wetlands and then there is some mitigation—is that part of the wetlands?

Colonel KING. Well, there are several—recreation areas. The two remaining to be finished are Doctors Creek Park and South Sulphur Creek Park.

Mr. MYERS. I thought flying over it I saw some recreation areas.

Colonel KING. Yes, sir.

Mr. MYERS. Sometime during the winter months I flew into Dallas.

Colonel KING. Yes, sir. This is just all those little odds and ends, if you will.

Mr. MYERS. Who will operate those recreation areas once they are completed?

Colonel KING. The Corps will operate ours.

Mr. MYERS. The State does not take them over, then?

Colonel KING. I am sorry. I am wrong. For Cooper Lake, with the agreement we have with the Texas Parks and Wildlife Department, they will operate those projects.

TEXAS FLOODS

Mr. MYERS. The State will operate, assume the responsibility upon completion. The October—you showed a view of the October 1994 flood and you had several flood slides. How could that flood have been prevented? What could have been done to help prevent—or at least reduce the impact of the flood?

Colonel KING. Sir, like the earlier Midwest floods a year or so ago, it just rained too much. The storm that we had in the Houston area would have overcome about anything.

Interestingly enough, the storm center itself went right north and east of town. We picked up a little bit of rain in our Addicks and Barker Reservoirs in the northwest part of Houston, but it really dumped in the river basin right north and east. This is the San Jacinto River. As shown in most of the newsreels, the San Jacinto River is where the pipeline broke with all the flames coming up downstream. It is not a Federal project. That is not a Federal project at all over there, and we do not claim any benefits accordingly. But any time you get that type of rain, it is going to be a huge problem for anyone involved in flood control.

Mr. MYERS. Well, I have been on the committee for 26 years now. It seems like you have had more floods in Texas in the last few years than we used to have. Is there a pattern change? Am I correct on that from you Texans? It just seems like we didn't have that experience. At least we didn't receive testimony of big floods. The last several years, we had severe floods in Texas.

Colonel KING. It is pretty flat out there, Mr. Chairman, so it doesn't take a lot of rain to really flood. But I could not give you any insights as to pattern changes.

Mr. MYERS. I used to serve on the Agriculture Committee and Bob Poage, who is gone now but he was Chairman of the Agriculture Committee, and we were riding along on a bus and Bob knew—all over the country he knew almost every farm, it seemed like, and he was saying that last year in his area of Texas, that they received 9.1 inches of rain. I said, Bob, how do you know it was 9.1? He said, I was there the night it fell.

Colonel KING. It can happen.

Mr. MYERS. Can you please provide for the record a listing of the flood damages prevented by Southwestern Division projects?

Colonel KING. Yes, sir.

[The information follows:]

FLOOD DAMAGES PREVENTED, FDP, VERSUS INVESTMENT
SOUTHWESTERN DIVISION

CUMULATIVE THRU FISCAL YEAR 1994

STATE PROJECT	FLOOD DAMAGES PREVENTED ($000)	CONSTRUCTION COSTS ($000)	O&M COSTS ($000)	TOTAL COSTS ($000)
ARKANSAS				
BEAVER LAKE	29,716	67,325	59,112	126,437
BLUE MOUNTAIN LAKE	25,254	5,070	16,559	21,629
BULL SHOALS LAKE	123,057	88,859	93,567	182,426
DEQUEEN LAKE	6,733	19,624	12,112	31,736
DIERKS LAKE	4,580	16,003	12,218	28,221
GILLHAM LAKE	9,102	17,827	11,522	29,349
GREERS FERRY LAKE	25,856	48,865	78,677	127,542
MILLWOOD LAKE	10,970	46,091	32,548	78,639
NIMROD LAKE	17,335	4,006	20,534	24,540
NORFOLK LAKE	41,339	70,702	64,755	135,457
ARKANSAS SUBTOTAL	293,942			785,976
ARKANSAS FDP/TOTAL COST RATIO = .4				
COLORADO				
JOHN MARTIN RESERVOIR	87,609	15,555	25,734	41,289
TRINIDAD LAKE	0	55,775	7,506	63,281
COLORADO SUBTOTAL	87,609			104,570
COLORADO FDP/TOTAL COST RATIO = .8				
KANSAS				
COUNCIL GROVE LAKE	42,564	11,810	16,291	28,101
EL DORADO LAKE	24,897	92,386	5,049	97,435
ELK CITY LAKE	125,742	19,053	14,357	33,410
FALL RIVER LAKE	103,133	10,551	15,978	26,529
JOHN REDMOND DAM AND RESERVOIR	162,927	28,152	23,977	52,129
MARION RESERVOIR	50,338	13,421	16,662	30,083
PEARSON-SKUBITZ BIG HILL LAKE	19,733	16,879	10,035	26,914
KANSAS SUBTOTAL	529,334			294,601
KANSAS FDP/TOTAL COST RATIO = 1.8				

CUMULATIVE THRU FISCAL YEAR 1994

STATE PROJECT	FLOOD DAMAGES PREVENTED ($000)	CONSTRUCTION COSTS ($000)	O&M COSTS ($000)	TOTAL COSTS ($000)
MISSOURI				
CLEARWATER LAKE	120,600	22,528	34,075	56,603
TABLE ROCK LAKE	75,681	67,224	88,084	155,308
MISSOURI SUBTOTAL	196,281			211,911
MISSOURI FDP/TOTAL COST RATIO = .9				
NEW MEXICO				
ABIQUIU DAM (1)	364,593	26,745	31,139	57,884
CONCHAS LAKE	81	13,821	19,775	33,596
COCHITI LAKE(1)	400,037	96,956	21,342	118,298
GALISTEO DAM	0	14,275	2,897	17,172
JEMEZ CANYON DAM	15,944	6,294	9,074	15,368
SANTA ROSA DAM AND LAKE	13	41,039	8,761	49,800
TWO RIVERS DAM	83,921	4,847	4,365	9,212
NEW MEXICO SUBTOTAL	864,589			301,330
NEW MEXICO FDP/TOTAL COST RATIO = 2.9				
OKLAHOMA				
ARCADIA LAKE	1,916	85,283	2,495	87,778
BIRCH LAKE	42,408	13,549	13,626	27,175
BROKEN BOW LAKE	19,819	41,223	27,518	68,741
CANTON LAKE	8,893	10,919	29,632	40,551
COPAN LAKE	285,928	92,035	7,828	99,863
EUFAULA LAKE	131,587	123,770	67,585	191,355
FORT GIBSON LAKE	76,879	43,498	63,593	107,091
FORT SUPPLY LAKE	3,175	7,723	14,440	22,163
GREAT SALT PLAINS LAKE	42,074	4,626	8,904	13,530
HEYBURN LAKE	16,311	2,561	12,115	14,676
HUGO LAKE	25,484	41,180	23,614	64,794
HULAH LAKE	460,411	11,182	12,790	23,972
KAW LAKE	326,487	109,429	27,303	136,732
KEYSTONE LAKE	484,719	123,171	54,517	177,688
OOLOGAH LAKE	198,408	46,722	26,889	73,611
OPTIMA LAKE	11	47,173	7,012	54,185
PAT MAYSE LAKE	6,759	9,310	15,451	24,761
PENSACOLA RESERVOIR - LAKE O' CHEROKEES	75,325	-	43,518	43,518
PINE CREEK LAKE	23,103	20,628	16,484	37,112
SARDIS LAKE	17,628	68,518	8,659	77,177

CUMULATIVE THRU FISCAL YEAR 1994

STATE PROJECT	FLOOD DAMAGES PREVENTED ($000)	CONSTRUCTION COSTS ($000)	O&M COSTS ($000)	TOTAL COSTS ($000)
OKLAHOMA CONTINUED				
SKIATOOK LAKE OK	121,377	106,269	8,620	114,889
TENKILLER FERRY LAKE	58,060	24,103	53,926	78,029
DENISON DAM - LAKE TEXOMA, TX AND OK	123,665	68,019	111,414	179,433
TORONTO LAKE	107,563	13,896	6,675	20,571
WAURIKA LAKE	34,018	69,731	13,830	83,561
WISTER LAKE	131,913	21,633	14,599	36,232
OKLAHOMA SUBTOTAL	2,823,921			1,899,188
OKLAHOMA FDP/TOTAL COST RATIO = 1.5				
TEXAS				
AQUILLA LAKE	16,550	45,506	5,379	50,885
BARDWELL LAKE	10,355	10,934	21,230	32,164
BELTON LAKE	132,461	16,960	33,033	49,993
BENBROOK LAKE(2)	2,234,003	13,070	27,527	40,597
BUFFALO BAYOU AND TRIBUTARIES	1,549,962	86,830	27,815	114,645
CANYON LAKE	100,730	19.088	22,263	41,351
COOPER LAKE AND CHANNELS	2,205	131,901	2,025	133,926
FERRELLS BRIDGE DAM-LAKE O' THE PINES	9,077	14,175	37,344	51,519
O C FISHER DAM AND LAKE	2,376	16,027	19,218	35,245
GRANGER DAM AND LAKE	26,807	101,796	15,799	117,595
NORTH SAN GABRIEL DAM AND LAKE GEORGETOWN	5,375	(4)	14,519	14,519
GRAPEVINE LAKE(3)	3,288,479	21,317	33,526	54,843
HORDS CREEK LAKE	937	2,731	15,566	18,297
JOE POOL LAKE	415,639	188,779	4,705	193,484
LAKE KEMP	4,425	7,638	2,750	10,388
LAVON LAKE	162,448	82,662	37,890	120,552
LEWISVILLE DAM/RAY ROBERTS LAKE(3)	11,506,018	329,383	50,269	379,652
NAVARRO MILLS LAKE	33,431	9,847	21,141	30,988
PROCTOR LAKE	36,096	14,469	25,102	39,571
SAM RAYBURN DAM AND RESERVOIR	284,487	60,670	57,539	118,209
SOMERVILLE LAKE	43,320	27,790	31,289	59,079
TOWN BLUFF DAM-B A STEINHAGEN LAKE	0	6,603	20,589	27,192
STILLHOUSE HOLLOW DAM	31,379	20,522	21,266	41,788

CUMULATIVE THRU FISCAL YEAR 1994

STATE PROJECT	FLOOD DAMAGES PREVENTED ($000)	CONSTRUCTION COSTS ($000)	O&M COSTS ($000)	TOTAL COSTS ($000)
TEXAS CONTINUED				
WRIGHT PATMAN DAM AND LAKE	13,859	35,732	35,814	71,546
WACO LAKE	117,421	49,521	32,849	82,370
WHITNEY LAKE	232,472	42,953	54,938	97,891
TEXAS SUBTOTAL	20,260,312			2,028,289
TEXAS FDP/TOTAL COST RATIO = 10.0				
SOUTHWESTERN DIVISION TOTAL	25,055,988			5,625,865
SWD FDP/TOTAL COST RATIO = 4.5				

(1) Includes Rio Grande Floodway and Albuquerque Diversion Channel.
(2) Includes Fort Worth Floodway System.
(3) Includes Dallas Floodway System.
(4) Included in Granger Dam and Lake.

It must be emphasized that the above costs for each project includes the total costs for constructing, operating, and maintaining the entire project. Therefore, these costs include, where applicable, the cost of hydropower, municipal and industrial water supply, and recreation. None of the corresponding benefits for these purposes are included in the Flood Damage Prevented amounts shown above.

Mr. MYERS. Well, thank you for your testimony this morning, Colonel King. Best wishes to you in your next life, whatever you decide it is going to be, if you haven't already decided.

For each of you, your colleagues, I expect you will be back then. The heads come and go but the workers still stay there, don't they.

Mr. JOHNSON. Yes, sir.

Mr. MYERS. Thank you for your testimony. Best wishes to you and there will be some questions provided for the record, if you would, please.

Colonel KING. Yes, sir.

[The information follows:]

OPTIMA LAKE, OKLAHOMA

Mr. MYERS. Please describe for the Committee the new reconnaissance study you plan to undertake for the Optima Lake, Oklahoma, project.

Colonel KING. Sir, the current Optima Lake project does not provide a dependable yield of water supply and is not providing flood control or other anticipated benefits. The reconnaissance study would examine various alternative uses of existing project resources to provide increased benefits to the nation.

GULF INTRACOASTAL WATERWAY
PORT O'CONNOR TO CORPUS CHRISTI BAY, TEXAS

Mr. MYERS. The Gulf Intracoastal Waterway, Port O'Connor to Corpus Christi Bay, Texas, study will look at, among other things, the siting of mooring facilities. Why shouldn't the establishment of mooring facilities be a responsibility of the users of the waterway who would benefit from them?

Colonel KING. Sir, current U.S. Army Corps of Engineers guidelines place the establishment of mooring facilities as a Federal responsibility for the benefit of all waterway users. Non-Federal interests are responsible for establishment of mooring facilities for the convenience of individual users or those associated with localized operations.

SABINE-NECHES WATERWAY
CHANNEL TO ORANGE, TEXAS

Mr. MYERS. Why were no funds requested to continue the Sabine-Neches Waterway, Channel to Orange, Texas, study?

Colonel KING. Sir, our reconnaissance studies indicate that historical and projected future commodity tonnages are not sufficient to justify the expense of deepening the channel. Therefore, there is no justification for conducting further studies on the Channel to Orange. A termination report is currently being prepared, and is scheduled to be completed in Fiscal Year 1995.

MAY BRANCH, FORT SMITH, ARKANSAS

Mr. MYERS. What is the connection between the May Branch, Fort Smith, Arkansas, project and the Mill Creek, Arkansas, project?

Colonel KING. Sir, both streams are located within the city limits of Fort Smith, Arkansas. The city is the non-Federal cost sharing sponsor for the Mill Creek Section 205 Continuing Authorities Program flood control project and the May Branch feasibility study. Construction on the Mill Creek project is complete but a claim submitted by the construction contractor has not been settled. Since Federal expenditures have almost reached the $5 million statutory Section 205 limit for this project, the city would be liable for paying most of the claim. Until the claim is settled, the city is unable to initiate the cost-shared Feasibility Study on May Branch.

PECAN BAYOU LAKE, TEXAS

Mr. MYERS. Was the feasibility cost-sharing agreement for the Pecan Bayou, Brownwood, Texas, study executed in January of this year as scheduled?

Colonel KING. Yes, sir. The agreement was executed on 31 January 1995.

CYPRESS VALLEY WATERSHED, TEXAS

Mr. MYERS. In FY 1995, $1,077,000 was provided for the Cypress Valley Watershed, Texas, project to complete the reconnaissance phase of the watershed management plan and proceed with development of the Geographic Information System and water resources and restoration activities in cooperation with non-Federal interests. What is the status of that work?

Colonel KING. Sir, the $1,077,000 provided was sufficient to fully fund both the reconnaissance phase of the watershed management plan and the development of the Geographic Information System and related resource inventory. Both of these activities are proceeding on schedule and in close coordination with the Texas Parks and Wildlife Department. The reconnaissance study and resource inventory are scheduled for completion in September 1995. The reconnaissance phase is targeted for completion in March 1996.

Mr. MYERS. Why was only $227,000 allocated to the project this year?

Colonel KING. Sir, the allocation mentioned only pertains to the watershed management plan. An additional $850,000 was allocated to proceed with the development of the Geographic Information System and related resource inventory. The total allocation for both activities was $1,077,000.

GULF INTRACOASTAL WATERWAY
CORPUS CHRISTI BAY TO PORT ISABEL, TEXAS

Mr. MYERS. What revisions are being made to the Gulf Intracoastal Waterway, Corpus Christi Bay to Port Isabel, Texas, reconnaissance study to make it comply with current policy?

Colonel KING. Sir, only one project purpose that reflects Federal interest and economic viability needs to be identified to initiate feasibility phase studies. Environmental restoration was originally identified as the potential project purpose; however, it is being eliminated because a non-Federal cost sharing sponsor has not been identified as required by current policy. Currently, the reconnaissance report is being revised to demonstrate Federal interest in further navigation studies to determine the optimum dimensions of this reach of the waterway. Feasibility studies would be at full Federal expense.

Mr. MYERS. When will the review of the reconnaissance report be completed?

Colonel KING. Sir, the revised report is scheduled to be resubmitted for review by late April 1995. Review of the revised report is expected to take 30 to 60 days.

GULF INTRACOASTAL WATERWAY
ARANSAS NATIONAL WILDLIFE REFUGE, TEXAS

Mr. MYERS. Has any attempt been made to quantify the benefits associated with the Gulf Intracoastal Waterway - Aransas National Wildlife Refuge, Texas, project?

Colonel KING. Sir, Federal interest in solving the erosion problems through the critical habitat of the endangered whooping crane has been demonstrated in two ways. One is through the Endangered Species Act of 1973 which requires every Federal agency to ensure that any action it is involved with does not impact on an endangered species or its habitat. Implicitly, this would involve setting the benefits equal to whatever costs that may be involved. The second means of demonstrating Federal interest is through the more traditional benefit-cost analysis procedures. Our analyses show that keeping the waterway open through implementation of shoreline erosion and spill control would generate over $40 million annually in transportation cost savings benefits as compared to the next least costly transportation mode of shipping the same commodities that presently transit this portion of the Gulf Intracoastal Waterway.

GREENS BAYOU, HOUSTON, TEXAS

Mr. MYERS. If the local sponsor for the Greens Bayou, Texas, project requested that the project be divided into separable elements, and you have been able to identify separable elements, why did headquarters direct that phased construction be pursued instead?

Colonel KING. Sir, Higher Authority directed that phased construction be pursued for two reasons. First, separable elements could not be approved because of economic and environmental concerns associated with the first identified separable element. Second, phased construction does not require that all of the sponsor's financing be committed prior to signing a single Project Cooperation Agreement.

Mr. MYERS. What will determine if you undertake a General Reevaluation Report or a Project Design Memorandum?

Colonel KING. Sir, the local sponsor, the Harris County Flood Control District, has requested that the project be reviewed to determine if reformulation is required. The degree to which the project needs to be modified to reflect changed economic, physical, and environmental conditions in the watershed will determine whether we undertake a General Reevaluation Report or a Project Design Memorandum. Minor modifications can be accomplished with a Project Design Memorandum. Significant modifications would be accomplished with a General Reevaluation Report.

Mr. MYERS. When do you anticipate you will reach agreement with the local sponsor on how to proceed with the project?

Colonel KING. Sir, in partnering sessions with the local sponsor, we have agreed on an approach for phased construction of the project which is in concert with our sponsor's financial capability. This will require revisions to the existing Project Management Plan. Coordination with the sponsor on these revisions will begin in March 1995. The local sponsor has provided a letter of continued support for the project.

WINFIELD, KANSAS

Mr. MYERS. What is the purpose of the expanded General Reevaluation Report being prepared for the Winfield, Kansas, project.

Colonel KING. Sir, the purpose of the General Reevaluation Report is to develop the final project design. As a cost and time reduction measure, this report is being expanded to a Design Memorandum level of detail. This measure will reduce the number of technical documents developed and shorten the time period needed to complete the overall project.

MCCLELLAN-KERR ARKANSAS RIVER NAVIGATION SYSTEM LOCKS AND DAMS, ARKANSAS AND OKLAHOMA

MONTGOMERY POINT LOCK AND DAM

Mr. MYERS. Are you proceeding with land acquisition for the Montgomery Point Lock and Dam feature of the McClellan Kerr-Arkansas River Navigation System?

Colonel KING. Yes, sir. Land acquisition was initiated in December 1994.

Mr. MYERS. Has the report you prepared to support the economic justification for the Montgomery Point Lock and Dam been approved?

Colonel KING. Yes, sir. The report was approved by The Assistant Secretary of the Army for Civil Works on 4 February 1994.

Mr. MYERS. Based on current schedules, when would the first construction contract for the Montgomery Point Lock and Dam be awarded?

Colonel KING. Sir, the Water Resources Development Act of 1986 requires that all new inland navigation projects be cost shared with the Inland Waterways Trust Fund, IWTF. Plans and specifications for the access road are complete. Initiation of construction is pending appropriation of funds from the IWTF.

ALAMOSA, COLORADO

Mr. MYERS. When will the first construction contract for the Alamosa, Colorado, project be awarded?

Colonel KING. Sir, the first construction contract for the Alamosa, Colorado project is scheduled to be awarded in January 1996, following real estate acquisition.

ALAMOGORDO, NEW MEXICO

Mr. MYERS. Why will it take so long to execute the project cooperation agreement for the Alamogordo, New Mexico, project?

Colonel KING. Sir, funds to initiate construction of the diversion channel were appropriated in Fiscal Year 1988; however, work on the project was discontinued in September 1988, without a contract being awarded, because the local sponsor could not give assurances of local cooperation. In Fiscal Year 1993, we prepared a letter report which identified a more affordable flood control project in accordance with the local sponsor's request. We are currently preparing a General Reevaluation Report with a Technical Appendix that will describe the analysis and formulation of various flood control alternatives for the city of Alamogordo. The Project Cooperation Agreement is scheduled to be executed after the scheduled June 1998 approval of the General Reevaluation Report.

CLEAR CREEK, TEXAS

Mr. MYERS. What work has the local sponsor for the Clear Creek, Texas, project undertaken thus far?

Colonel KING. Sir, the local sponsors for the Clear Creek project are Harris and Galveston Counties, Texas. Harris County has completed relocation of major industrial pipelines and acquired the rights-of-way for the gated structure and the second outlet channel except for the Southern Pacific Transportation Company right-of-way, which is currently being negotiated with the Corps. Harris County has also constructed two frontage road bridges at State Highway 146 and the Todville Road Bridge. The Texas State Department of Transportation has constructed the State Highway 3 bridges. Galveston County has acquired the upland disposal area for dredging the second outlet channel and has litigation pending on right-of-way in the upstream reach from Mile 3.8 to 7.6. The local sponsors’ total expenditures for the project, through June 1994, were approximately $12.7 million, with Federal expenditures of approximately $13.3 million.

ACEQUIAS IRRIGATION SYSTEM, NEW MEXICO

Mr. MYERS. Has a local cooperation agreement for the work planned in fiscal year 1996 on the Acequias Irrigation System, New Mexico, project been executed?

Colonel KING. Sir, the General Local Cooperation Agreement for the Acequias was executed in June 1992. However, each fiscal year a supplemental agreement is required which identifies work to be accomplished for that fiscal year. The supplemental agreement for Fiscal Year 1996 can not be executed until both Federal and State of New Mexico funds have been appropriated.

Mr. MYERS. When will it be executed?

Colonel KING. Sir, the supplemental agreement is scheduled to be executed in the first quarter of Fiscal Year 1996.

RAY ROBERTS LAKE, TEXAS
GREENBELT

Mr. MYERS. What work has been undertaken thus far on the Ray Roberts Lake, Texas, Greenbelt project?

Colonel KING. Sir, the design memorandum for the Greenbelt has been completed. Land acquisition and development of the final plans and specifications have been initiated, and are scheduled to be completed in September 1995 and October 1995, respectively.

WACO LAKE, TEXAS

Mr. MYERS. What is the source of funds reprogrammed to the Waco Lake, Texas, project in fiscal year 1995?

Colonel KING. Sir, funds in the amount of $200,000 were reprogrammed from Cooper Lake and Channels, Texas. These funds were surplus due to lower land costs and less than anticipated requirement for the access roads.

OPERATION AND MAINTENANCE

Mr. MYERS. What is the meaning of the phrase "realignment of operation and maintenance funding to more realistically reflect work being accomplished?"

Colonel KING. Sir, in previous budget submittals, some minor or "operational maintenance" activities performed annually at the projects had been classified as operations activities. For example, these activities might include roof repairs in one year and repainting all comfort stations the next year. Based on more specific guidance from Higher Authority, it was determined that some of these activities should have been classified as maintenance. Therefore, these activities have been realigned from the operational activity account to the maintenance account in the Fiscal Year 1996 program as appropriate.

COOPER LAKE AND CHANNELS, TEXAS
SHORELINE EROSION

Mr. MYERS. What is the status of shoreline erosion repairs at the Cooper Lake, Texas, project?

Colonel KING. Sir, surveys and cost estimates have been completed for a rock jetty for the Doctors Creek boat ramp. Work for other selected areas in South Sulphur Park is complete. Design for the beach breakwaters for the two beach areas is underway. Construction is scheduled for award in May 1995 and to be completed in the fourth quarter of Fiscal Year 1995.

Mr. MYERS. Are additional funds required to complete the work?

Colonel KING. No, sir. Sufficient funds have been allocated to complete the work.

ESTELLINE SPRINGS, TEXAS

Mr. MYERS. Please describe the Estelline Springs, Texas, experimental project.

Colonel KING. Sir, the experimental project near Estelline Springs, Texas, in Hall County, controls brine emissions from a very large underground spring and has been fully operational since 1963. The project consists of a ring dike approximately 10 feet high and 340 feet in diameter around the spring. The dike extends to bedrock and allows the depth of water within the dike to increase until all flow from the spring is suppressed. The project is removing approximately 240 tons per day of chlorides from the Red River.

ARKANSAS CITY, KANSAS

Mr. MYERS. In fiscal year 1995, $700,000 was provided for the Arkansas City, Kansas, project. The funds were to be used to initiate plans and specifications, negotiate a project cooperation agreement and a section 215 agreement, and ready the project for construction. What is the status of the project?

Colonel KING. Sir, with the funds provided, we will complete plans and specifications, negotiate and execute a Section 215 Agreement, and negotiate the Project Cooperation Agreement. Since the current project cost estimate exceeds the Section 902 limit, amendment of the Congressional authorization for this project is required prior to approval to initiate construction and execution of the Project Cooperation Agreement.

WEDNESDAY, FEBRUARY 22, 1995.

NORTH PACIFIC DIVISION

WITNESSES

MAJ. GEN. ERNEST J. HARRELL, DIVISION ENGINEER

JOHN E. VELEHRADSKY, P.E., DIRECTOR OF ENGINEERING AND TECHNICAL SERVICES

J. MICHAEL SMITH, P.E., ACTING CHIEF OF CIVIL PROGRAMS MANAGEMENT DIVISION

OPENING REMARKS

Mr. MYERS. General Harrell, we would be pleased to hear from you at this time.

One time when I was on active duty, I had shoulder problems. I couldn't salute. You go down the street and you have to say good morning, good afternoon. Try to avoid——

General HARRELL. Just wave.

Mr. MYERS. Just wave, huh? Left-handed salute. And I—how does an engineer get CIB? How did you?

General HARRELL. Early in life I had an opportunity to serve with the special forces in Vietnam.

Mr. MYERS. I didn't wear mine this morning. I didn't serve in the special forces. Kind of special at the time in World War II. I am a lot older than you.

The committee would be pleased to hear from you, General Harrell. Your entire statement will be in the record and you may proceed as you care.

INTRODUCTION

General HARRELL. Mr. Chairman, and distinguished Members of the committee, I am Major General Ernie Harrell, and I am pleased to report to you on the civil works activities of the North Pacific Division. With me on my right is Mr. John Velehradsky, Director of Engineering and Technical Services and Mr. Mike Smith of our Programs office.

I have provided a written report of my testimony for the record. With your permission, I will give a short summary.

REGIONAL OVERVIEW

The North Pacific Division encompasses the State of Alaska and the river basins of the Pacific Northwest, about one-fourth of the land mass of the United States.

In Alaska, our civil works activities concentrate on the development of harbors and regulation of wetlands.

The river basins of the Northwest have an extensive Federal investment in multipurpose projects. Operating and maintaining these projects and adapting them to serve contemporary needs is the current focus of our work in the region.

With this large infrastructure, O&M represents about two-thirds of our budget. Major rehabilitations of aging power plants and environmental restorations, including our effort to assist in the recovery of Columbia River salmon, highlight the rest of our program.

PROGRAM SUMMARY

Our fiscal year 1996 civil works program totals $339 million, including about $10 million scheduled for carryover from fiscal year 1995. GI accounts for 2 percent; Construction, General, 35 percent; and Operation and Maintenance, 63 percent.

PROGRAM PERFORMANCE

In recent years, we budgeted for schedules that were overly optimistic and we requested more than we spent. As a result, we accumulated reserves which may not be consumed in the next year or two.

In fiscal year 1994, we expended $287 million, about 80 percent of the $358 million available. The bulk of the slippage occurred in our construction program for a variety of project-specific reasons.

We have substantially reduced our request in recognition of the cushion and our historic spending pattern. In our opinion, the schedules underlying the program are realistic and accountability for achieving them is a part of our personal performance appraisals.

We have notified our sponsors of our spending patterns and the impacts on their projects.

The bottom line is that our earlier estimates of completion times were overly optimistic.

GENERAL INVESTIGATIONS

Our General Investigations program includes 25 studies which account for $6 million, or 2 percent, of our request. There are 7 new starts, and 14 continuing, and 4 in PED.

NAVIGATION STUDIES

The increasing use of deeper-draft vessels and growing trade with Pacific Rim nations has created the need for deeper harbors and channels. These improvements are in the national interest so that U.S. ports can remain competitive in foreign trade.

Our studies for the lower Columbia River in both Oregon and Washington, Coos Bay in Oregon, and Cook Inlet in Alaska address this requirement.

Also, in Alaska, there is demand to improve navigation in remote communities and the fishing industry. Seven studies for this purpose are budgeted at locations such as Kake and Nome harbors.

OTHER STUDIES

In Washington State, we are evaluating a pool raise for additional hydropower from Chief Joseph Dam, modifications at Howard Hanson Dam for more water supply, and solutions for long-term disposal of contaminated materials from Puget Sound.

In Oregon, we have three studies budgeted for fishery restoration in the Willamette River.

Five of our new starts address multiple water resources needs, including environmental restorations related to previous recovery work from the eruption of Mt. St. Helens.

CONSTRUCTION

Our construction program requirements for Fiscal Year 1996 is $119 million to continue funding for eight projects, including the harbor project at Kodiak, Alaska, and the dam safety project at Howard Hanson Dam, located in Washington.

CHEHALIS RIVER, WASHINGTON

The construction contract award for the Chehalis River in Washington, flood control project, was delayed about a year because of complications with land acquisition by the local sponsor. Award is now scheduled for September of this year.

ELK CREEK LAKE, OREGON

At the unfinished Elk Creek Dam in Oregon, the court-imposed injunction against further construction remains in effect. We are continuing to maintain the partially completed structure and continue to conduct necessary studies.

MAJOR REHABILITATION

Rehab of hydropower facilities at Bonneville and John Day dams will continue in fiscal year 1996.

A rehabilitation report for the Dalles hydropower facilities is scheduled for completion this year.

LOWER SNAKE RIVER FISH AND WILDLIFE

Work on the Lower Snake River fish and wildlife compensation project in Washington, Oregon, and Idaho, will develop lands acquired for wildlife and improve fish hatchery facilities there.

COLUMBIA RIVER SALMON

NMFS, the National Marines Fisheries Service, believes that our projects contribute to the decline of the Columbia River salmon. During their life cycle, juvenile and adult salmon must migrate past a number of mainstem dams and reservoirs. In 1991 and 1992, NMFS listed three species of Snake River salmon as threatened or endangered. They are scheduled to release their biological opinion on the operation of the Federal Columbia River power system soon. This will provide a blueprint for Federal and regional action.

The Corps' Columbia River juvenile fish mitigation project is based on extensive consultation with NMFS and coordination with regional interests.

OPERATION AND MAINTENANCE

The North Pacific Division is charged with the stewardship of 18 major multipurpose power projects, 13 large flood control dams, and 107 navigation projects.

The O&M program request of $214 million will provide for operation and maintenance at these projects, including our responsibility for fish resources. As mentioned earlier, NMFS is issuing a biological opinion on Columbia River operations. It calls for higher target flows for 1995, spill for fish passage, and for some dams again to be operated at lower than normal pool levels during part of the year. Also, we will continue to barge and truck juvenile fish past the dams.

Recent years have been very dry in the Columbia basin. Our earlier projection is for improved runoff this season, but still a little below normal. If our reservoirs do not fill this year, these circumstances may restrict water for fish, power, recreation, and irrigation.

COLUMBIA RIVER SYSTEM OPERATION REVIEW

A major study, the Columbia River System Operation Review, is examining alternative long-term strategies for operating the system. It is a joint effort of the Bureau of Reclamation, Bonneville Power Administration, and the Army Corps to support future Federal decisions on Columbia River operation agreements.

The final EIS is scheduled for completion this year and supplemental studies are scheduled for fiscal year 1996.

ICE HARBOR LOCK GATE REPAIR

The lock gate at Ice Harbor dam must be replaced because of recurring cracks. Construction of the new gate is scheduled to begin this year and to be completed in fiscal year 1996.

GRAYS HARBOR, WASHINGTON, JETTY BREACH

Last year, we filled a breach that developed at the base of the Grays Harbor South Jetty. Funds are programmed for additional repair, if necessary, while a permanent solution is being developed.

SUMMARY

In summary, Mr. Chairman, our fiscal year 1996 program request has been carefully developed to meet our civil works responsibilities in the region, and that concludes my report and I am now ready to respond to any questions you may have.

Mr. MYERS. Well, thank you, General Harrell, for your presentation this morning.

[The statement of General Harrell follows:]

STATUS REPORT ON CIVIL WORKS ACTIVITIES
U.S. ARMY CORPS OF ENGINEERS
NORTH PACIFIC DIVISION
FISCAL YEAR 1996

MAJOR GENERAL ERNEST J. HARRELL, DIVISION ENGINEER

REGIONAL OVERVIEW

The North Pacific Division encompasses the state of Alaska and the river basins of the Pacific Northwest, about one-fourth of the land mass of the United States. The Division headquarters is in Portland, Oregon. Four District offices are in Anchorage, Alaska; Portland, Oregon; Seattle, Washington; and Walla Walla, Washington.

In Alaska, our civil works activities concentrate on the development of harbors and regulation of wetlands.

A principal feature of the Northwest is the Columbia River Basin with an extensive federal investment in multipurpose projects operated to serve navigation, flood control, power, recreation, water supply, and fish and wildlife purposes. Operating and maintaining our existing projects and adapting them to serve contemporary needs is the current focus of our work in this region.

With this large infrastructure, O&M represents almost two-thirds of our budget. Major rehabilitations of aging power plants and environmental restorations, including our large construction effort to assist in the recovery of Columbia River salmon, highlight the rest of our program.

PROGRAM SUMMARY

Our FY 96 Civil Works program totals $339,215,000, including about $10.2 million scheduled for carryover from FY 95. GI accounts for two percent; CG, 35 percent; and O&M, 63 percent.

PROGRAM PERFORMANCE

In recent years, we budgeted for schedules that were overly optimistic and we requested more than we spent. As a result, we accumulated reserves which may not be consumed in the next year or two.

In the fiscal year just ended, FY 94, we expended approximately $287 million, about 80 percent of $358 million available. The bulk of the slippage occurred in our construction program for a variety of project-specific reasons.

We have substantially reduced our request in recognition of that cushion and our historic spending pattern. In our opinion, the schedules underlying this program are realistic. Accountability for achieving them is a part of our personal performance appraisals.

We have absolute assurance from Corps Headquarters that in the event we expend funds faster that our historical pattern, they will reprogram unobligated funds to cover our awards and contractor earnings.

We have notified our sponsors of our spending patterns and the impacts on their projects.

The bottom line is that our earlier estimates of completion times were overly optimistic. While it will take longer to bring our projects on line than we had estimated, we are seeing significantly shorter time durations than we experienced prior to advent of WRDA 86 and the management change initiatives it forced us to undertake.

SMALL DISADVANTAGED BUSINESS CONTRACTING

We have had good success last year in our program for small disadvantaged business contracting. We awarded almost $45 million to such firms, including $33 million under Section 8(a). Native American firms received over $11 million. Additionally, $6.5 million went to disadvantaged subcontractors and over $11 million was received by women-owned businesses.

GENERAL INVESTIGATIONS

Our General Investigations program includes 25 studies which account for $6 million or two percent of our request. There are seven new starts, 14 continuing and four in PED.

NAVIGATION STUDIES

The increasing use of deeper-draft vessels and growing trade with Pacific Rim nations has created the need for deeper harbors and channels. These improvements are in the national interest so that U.S. ports can remain competitive in foreign trade. Our studies for the lower Columbia River, Oregon and Washington, Coos Bay, Oregon and Cook Inlet, Alaska address this requirement.

Also in Alaska, there is demand to improve navigation for remote communities and the fishing industry. Seven studies for this purpose are budgeted at locations such as Kake and Nome harbors.

OTHER STUDIES

In Washington State, we are evaluating a pool raise for additional hydropower from Chief Joseph dam, modifications at Howard Hanson dam for more water supply, and solutions for long term disposal of contaminated materials from Puget Sound.

In Oregon, we have three studies budgeted for fishery restoration in the Willamette River.

Five of our new starts address multiple water resource needs in separate river basins, including environmental restoration related to previous recovery work from the eruption of Mt. St. Helens.

CONSTRUCTION

Our construction program requirement for FY 96 is $119 million to continue funding for eight projects.

KODIAK HARBOR, ALASKA
HOWARD HANSON, DAM SAFETY, WASHINGTON

The harbor project at Kodiak, Alaska and the Dam Safety project for earthquake strengthening at Howard Hanson Dam, Washington are scheduled for completion with FY 96 funds.

CHEHALIS RIVER, SOUTH ABERDEEN AND COSMOPOLIS, WASHINGTON

The construction contract award for the Chehalis River, Washington, flood control project was delayed about a year because of complications with land acquisition by the local sponsor. Award is now scheduled for September 1995.

ELK CREEK LAKE, OREGON

At the unfinished Elk Creek Dam in Oregon, the court-imposed injunction against further construction remains in effect. However, in February 1994 the judge required additional studies related to NEPA and the Wild and Scenic Rivers Act. We are continuing to maintain the partially completed structure and conduct the studies.

MAJOR REHABILITATION

Rehabilitation of hydropower facilities at Bonneville and John Day dams will continue in FY 96. A rehabilitation report for The Dalles hydropower facilities is scheduled for completion this year.

LOWER SNAKE RIVER FISH AND WILDLIFE COMPENSATION, WASHINGTON, OREGON AND IDAHO

Work on the Lower Snake River Fish and Wildlife Compensation project in Washington, Oregon, and Idaho will develop lands acquired for wildlife and improve fish hatchery facilities.

COLUMBIA RIVER JUVENILE FISH MITIGATION
WASHINGTON, OREGON AND IDAHO

Corps-operated projects on the Snake and Columbia rivers have been identified by the National Marine Fisheries Service (NMFS) as one of the contributing factors in the decline of Columbia River salmon. During their life cycle, juvenile and adult salmon must migrate past a number of mainstem dams and reservoirs.

In 1991-92, NMFS listed three species of Snake River salmon as threatened or endangered. NMFS is scheduled to release its Biological Opinion on the operation of the Federal Columbia River Power System very soon. Concurrently, the overall draft recovery plan for the listed salmon species will be released for public review. These documents will provide a blueprint for federal and regional action.

The Corp's Columbia River Juvenile Fish Mitigation project is based on extensive consultation with National Marine Fisheries Service and coordination with regional interests. It includes major improvements to juvenile fish bypass systems and to facilities for barging young fish downstream. It also includes a mitigation analysis to assist the Service and the region in reaching a common basis for future recovery actions.

OPERATION AND MAINTENANCE

The North Pacific Division is charged with the stewardship of 18 major multipurpose power projects, 13 large flood control dams, and 107 navigation projects. The O&M program request of $214 million will provide for operation and maintenance at these projects, including our responsibility for fish resources.

COLUMBIA RIVER OPERATIONS

As discussed above, the National Marine Fisheries Service is issuing a Biological Opinion on Columbia River operations. It calls for higher target flows and spill in 1995 for fish passage, and some dams are again to be operated at lower than normal pool levels during part of the year. Also, we will continue to barge and truck juvenile fish past the dams.

Recent years have been very dry in the Columbia Basin. Our early projection is for improved runoff this season, but still a little below normal. With increased flow augmentation for fish, major hydroelectric reservoirs will not fill this year. These circumstances will impact water supply for fish, power, recreation and irrigation.

COLUMBIA RIVER SYSTEM OPERATION REVIEW

A major study, the Columbia River System Operation Review, is examining alternative long-term strategies for operating the system. It is a joint effort of the Bureau of Reclamation, Bonneville Power Administration, and the Corps to support future Federal decisions on

Columbia River operation agreements. The Final EIS is scheduled to be completed this year and supplemental studies are scheduled for FY 96.

ICE HARBOR GATE REPAIR, WASHINGTON

The lock gate at Ice Harbor dam must be replaced because of recurring cracks. Construction of the new gate is scheduled to begin this year and to be completed in early 1996.

GRAYS HARBOR, WASHINGTON, JETTY BREACH

Last year we filled a breach that developed at the base of the Grays Harbor South Jetty. Funds are programmed for additional repair, if necessary, while a permanent solution is being developed.

SUMMARY

In summary, our FY 96 program of about $339 million has been carefully developed to meet our civil works responsibilities.

[CLERK'S NOTE.—The justification sheets for the North Pacific Division follow:]

Justification of Estimates for Civil Functions Activities
Department of the Army, Corps of Engineers
Fiscal Year 1996

NORTH PACIFIC DIVISION

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Justification of Estimates for Civil Functions Activities
Department of the Army, Corps of Engineers
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SUMMARY NORTH PACIFIC DIVISION

	FY 1995 Allocations	FY 1996 Request	Increase or Decrease
General Investigations			
Surveys	$ 5,027,000	$ 4,876,000	$ - 151,000
Preconstruction Engineering and Design	919,500	1,423,000	+ 504,000
Subtotal General Investigations	5,946,000	6,299,000	+ 353,000
Construction, General			
Construction	76,522,000	107,207,000	+30,685,000
Dam Safety Assurance	7,631,000	1,587,000	-6,044,000
Subtotal Construction, General	84,153,000	108,794,000	+24,641,000
Operation and Maintenance, General			
Project Operations	83,046,000	83,709,000	+663,000
Project Maintenance	106,345,000	126,128,000	+19,783,000
Major Rehabilitation	4,500,000	4,065,000	-435,000
Subtotal Operation and Maintenance	193,891,000	213,902,000	+20,011,000
GRAND TOTAL, NORTH PACIFIC DIVISION	$283,990,000	$328,995,000	$+45,005,000

6 February 1995

Study	Total Estimated Federal Cost $	Allocation Prior to FY 1995 $	Allocation FY 1995 $	Tentative Allocation FY 1996 $	Additional to Complete After FY 1996 $
1. SURVEYS - NEW					
1a. Navigation Studies					
ALASKA					
Kuskokwim River	375,000	0	0	175,000	200,000

Kuskokwim River is one of the primary waterways used for inland navigation in Alaska. All communities along the river depend on it for transportation of vital supplies and fuel because no connecting road system exists. The navigation season usually ends by mid October because of ice cover on the river. Extending the navigation season would enable scheduling of fuel and cargo deliveries later in the fall so the more expensive air freight shipments could be reduced. The state of Alaska also believes that considerable savings of costs for new large tanks could occur if a dependable, longer navigation season existed. Many of the tank farms at the communities along this river are aged and need replacement; smaller replacement tanks could be used in some cases if late season delivery of fuel could be depended upon. This could save millions of dollars in capital costs and reduce maintenance costs and safety hazards by limiting inventories. Recent developments in ice control technologies including shallow draft ice breakers and channel improvements are worthy of consideration. These measures may also reduce flooding from ice jams in the spring. The Governor and the Alaska Department of Commerce and Economic Development expressed support for this study in March 1994 and are willing to cost share 50-50 of the feasibility phase that may follow the reconnaissance study.

Fiscal Year 1996 funds will be used to initiate the reconnaissance phase at full Federal expense. The study will focus on possible navigation improvements to reduce transportation costs and extend the navigation season. The reconnaissance report is scheduled for completion in February 1997, which is 12 months after initiation of the study. The reconnaissance phase is scheduled for completion in September 1997.

Study	Total Estimated Federal Cost $	Allocation Prior to FY 1995 $	Allocation FY 1995 $	Tentative Allocation FY 1996 $	Additional to Complete After FY 1996 $
1a. Navigation studies, Alaska (Cont'd)					
Nome Harbor	380,000	0	0	200,000	180,000

Nome Harbor is a major trans-shipment point for north western Alaska communities. Cargo shipped to Nome has averaged about 33,000 tons per year since 1986. Ocean-going barges transfer their cargo to smaller vessels which then deliver commodities to western Alaska communities. The existing harbor and jetties which were constructed in 1923 need modification and replacement. However, jetty replacements in-kind would cost millions of dollars and would not correct wave problems that currently cause significant damage to barges and project structures. Each year barges incur thousands of dollars damage when wave action causes them to ram the sheetpile entrance channel wall which has required millions of dollars of repair about every 10 years. There are also maintenance and safety problems at the existing harbor facilities. The existing sheet-pile entrance channel walls reflect waves into the harbor area which causes significant damage. The entrance jetties are undermined and have failed; they should be repaired, replaced or relocated. Bottom sediments within the upper turning basin of the harbor are contaminated and cannot be placed offshore; a new disposal site for the contaminated sediments must be found. A causeway extending to -20 foot depth was constructed near the harbor and is used for docking ocean barges but is too shallow to accommodate larger draft vessels. The construction of the causeway has interrupted the littoral drift in this area and erosion is occurring along the sand spit adjacent to the existing harbor entrance channel. A comprehensive evaluation of navigation improvements needed at Nome would enable planning the most cost efficient measures to reduce damages to vessels and structures and transportation costs for the area. Discussions were held with Nome officials in May 1993 and in 1994 to review the nature and scope of the study and they have expressed a willingness to cost share the feasibility phase studies that may follow. The City of Nome is willing to help cost share the feasibility study.

Fiscal Year 1996 funds will be used to initiate reconnaissance phase at full Federal expense. The study will concentrate on comprehensive plans to reduce damages to vessels and structures and transportation costs, an analysis of vessel sizes and drafts, the need for a small boat harbor, and options for disposal of contaminated dredge material. The ability of the existing harbor to satisfy existing and proposed navigation needs will be examined. The reconnaissance report is scheduled for completion in January 1997, which is 12 months after initiation of the study. The reconnaissance phase is scheduled for completion in August 1997.

APPROPRIATION TITLE: General Investigations, Fiscal Year 1996

North Pacific Division

Study	Total Estimated Federal Cost $	Allocation Prior to FY 1995 $	Allocation FY 1995 $	Tentative Allocation FY 1996 $	Additional to Complete After FY 1996 $
1b. Flood Damage Prevention Studies, Alaska - None					
1c. Shoreline Protection Studies - None					
1d. Special Studies					
ALASKA					
Chena River Watershed	380,000	0	0	200,000	180,000

The Chena River, a tributary of the Tanana River (a Yukon River tributary), originates in a mountainous area about 90 air miles east of Fairbanks in central Alaska. The river flows in a southwesterly direction from its' mountainous headwaters, terminating at its confluence with the Tanana River at Fairbanks. The total drainage area is 2,070 square miles. The Chena River has clear water not influenced by glacial runoff and includes many groundwater sources along its way. Several sources are geothermally heated, such as the Chena Hot Springs on the North Fork, which reaches temperatures to 160°F. The discharge of the Chena River at Fairbanks ranges from 100 to 74,400 cfs, averaging 1,344 cfs. Maximum discharge usually occurs in the period from May to September from a combination of snowmelt and heavy rainfall. Extreme low flows occur in winter when the river is frozen and air temperatures are as low as -60°F. Vegetation within the watershed consists of forested mountains and alpine tundra near the headwaters and muskeg and scrub near the mouth. Low areas are covered by black spruce, willow, and sedge with brush patches, pothole lakes, and tussock flats scattered throughout. About 75 regulatory actions per year have been processed regarding wetlands and increased activity is expected in the future as development expands. Some wetland mapping was done in 1987 but additional mapping would help define wetland values and functions and provide opportunities for general permits and restoration of critical wetlands. Approximately 50 per cent of the watershed is underlain by permafrost. The Chena River Lakes Flood Control Project, whose construction was completed in 1981, consists of a 7.1 mile-long earth-fill diversion structure (Moose Creek Dam) and floodway 17 miles east of Fairbanks for diversion of Chena River flood flows into the Tanana River; a levee along the Tanana River extending from the floodway to the confluence of the Chena and Tanana Rivers; and an interior drainage system on the Fairbanks side of the dam and levee. The concrete gravity gate structure, located in the dam at the Chena River, is operated to limit the flow in the Chena River to 12,000 cfs at Fairbanks. The community of North Pole, Alaska is located near the floodway and has experienced flooding of crawl spaces, basements, septic systems, and wells during operation of the flood control works. Public concern has been

Study	Total Estimated Federal Cost $	Allocation Prior to FY 1995 $	Allocation FY 1995 $	Tentative Allocation FY 1996 $	Additional to Complete After FY 1996 $

1d. Special Studies, Alaska, Chena River Watershed (Cont'd)

expressed in various public meetings in the regional media for these occurrences of high ground water in North Pole and for adverse affects of population growth and development on fish and wildlife in the Chena River watershed. The Chena River is popular for sport fishing and much of the watershed is likewise popular for sport hunting. A significant number of residents in this area of Alaska depend on these fishing and wildlife resources for subsistence. The watershed includes environmentally sensitive wetlands that could be affected by future urbanization and mining operations in the region or developments at Fort Wainwright in Fairbanks. Fish migration has declined in recent years and the reasons for this decline are unclear at present. Methods to restore the fish populations in the project area would be evaluated. The study would integrate protection and restoration of wetlands into the flood control and navigation needs of the watershed.

The reconnaissance study will focus on concerns for fish and wildlife impacts from population growth and related development in Fairbanks, North Pole, Fort Wainwright, and other areas of the Chena River watershed. Trends in fish and wildlife populations, health, and fishing and hunting harvests will be determined and interpreted by specialists with a view toward quantifying the direct and indirect effects of historical human population growth, regional land use practices, fishing and hunting regulation, and operation of the Chena River Lakes Flood Control Project. The study will identify means to eliminate, attenuate, or otherwise mitigate fish and wildlife resource adversity and propose measures with a federal interest which are economically justified or otherwise in keeping with current administrative policy. The Fairbanks North Star Borough which encompasses the entire watershed is the likely local sponsor and they understand the cost sharing that would be needed for a feasibility study.

Fiscal Year 1996 funds will be used to initiate the reconnaissance phase at full Federal expanse. The reconnaissance phase is scheduled for completion in July 1997.

OREGON

Walla Walla River, Watershed	295,000	0	0	100,000	195,000

The Walla Walla River is a tributary of the Columbia River and is located in southeastern Washington and northeastern

APPROPRIATION TITLE: General Investigations, Fiscal Year 1996

North Pacific Division

Study	Total Estimated Federal Cost $	Allocation Prior to FY 1995 $	Allocation FY 1995 $	Tentative Allocation FY 1996 $	Additional to Complete After FY 1996 $

1d. Special Studies, Oregon, Walla Walla River Watershed (Cont'd)

Oregon in Walla Walla and Umatilla Counties. Much local interest has been focused on this river including private irrigated agriculture, grazing and logging interests, local irrigation and soil conservation Districts, planningcommissions from both counties, Washington and Oregon Departments of Fish and Wildlife, the Confederated Tribes of the Umatilla Indian Reservation, U.S. Fish and Wildlife Service, and USDA Natural Resource Conservation Service. Of primary concern in the basin is water supply and quality for municipal and industrial needs, irrigated agriculture, and perhaps, most importantly, sustaining and restoring anadromous fisheries. The basin presently supports a harvestable steelhead fishery and once supported chinook and coho salmon. The town of Walla Walla presently derives its water supply from a protected watershed within the basin and there is already concern regarding over-allocation of surface water and depletion of ground-water supplies. Sections of the Walla Walla River and Mill Creek actually dry-up during the irrigation season. Walla Walla is also continually attracting new businesses and light industry (from agricultural product processing to high-tech R&D) some of which also create additional water needs.

The logging, farming, and grazing interests have been identified as being at least partly responsible for both aquatic and terrestrial habitat degradation in the basin. Especially in the arid valley, riparian vegetation is an extremely critical and valuable habitat element, both for its wildlife value and in maintaining the integrity of aquatic habitats by minimizing siltation and providing shade to keep water temperature low. Hundreds of miles of shorelines within the watershed have been made barren through overgrazing and farming "to the edge" which has created banks with steep walls prone to sloughing. This in turn creates significant sedimentation which is detrimental and counter to the spawning requirements of both anadromous and many freshwater indigenous species. The study would investigate the integration of protection and restoration of wetlands through bio-engineered remediation techniques. Other methods to be evaluated include wetland restoration, grassed waterways, retention structures, fish passage structures, riparian corridor restoration, and other environmental restoration associated with ensuring reasonable development within the watershed. Environmental restoration of the riparian zones would also prove their worth in flood damage reduction, water retention capabilities, and thus a prolonged seasonal streamflow. Watershed multiobjective natural resource management outputs associated with this study include urban and agricultural flood damage reduction at various locations in the basin, fish and wildlife, riparian and wetland restoration, water quality, water supply, erosion control, low flow augmentation, and recreation.

Study	Total Estimated Federal Cost $	Allocation Prior to FY 1995 $	Allocation FY 1995 $	Tentative Allocation FY 1996 $	Additional to Complete After FY 1996 $

1d. Special Studies, Oregon, Walla Walla River Watershed (Cont'd)

Walla Walla District of the Corps of Engineers has recently met with the Washington Department of Ecology (WDOE), who is in the midst of formulating water resource policy in the state. The WDOE has been successful in negotiating an interstate agreement between Pullman, Washington, and Moscow, Idaho, and they have a vested interest in establishing policy for wise use of water resources in the Walla Walla Basin, and has initiated two pilot watershed planning efforts based on the formation of teams consisting of all the local interests. These pilot efforts have met with success and recommendations made by these teams will influence state rulemaking. The WDOE is also funding some high priority watershed assessments to determine surface and groundwater availability before issuing any new permits for wells. The Walla Walla watershed has been included as one of the priority assessments. Both WDOE and the Umtailla Tribe are potential sponsors.

Fiscal Year 1996 funds will be used to initiate the reconnaissance phase at full Federal expense. The reconnaissance report is scheduled for completion in December 1996, which is 12 months after initiation of the study. The reconnaissance phase is scheduled for completion in June 1997.

1e. Comprehensive Studies

WASHINGTON

Duwamish/Green River	400,000	0	0	300,000	100,000

The Duwamish Rivers originate in the Cascade Mountains about 60 miles southeast of Seattle, Washington. The total drainage area is 438 square miles. The Green River flows through King County west and north to the historic mouth of the Black River, forming the Duwamish River. The Duwamish River empties into Elliott Bay in Puget Sound 11 miles downstream. Howard A. Hanson Dam, located at R.M. 64.5 on the Green River, provides flood control to the lower Green River Basin. There is a Federal Navigation channel and sediment catch basin in the lower Duwamish (R.M. 6.4). Historically a significant amount of wetlands and fish and wildlife habitat in the basin have been degraded or destroyed through a number of actions including fill from a federally constructed and maintained navigation project. Over 98 percent of the original estuary wetlands have been lost. Associated loss of functions should also be noted. Critical areas of juvenile refuge, feeding and osmoregulation are limited in this watershed. Low summer flows and high

Study	Total Estimated Federal Cost $	Allocation Prior to FY 1995 $	Allocation FY 1995 $	Tentative Allocation FY 1996 $	Additional to Complete After FY 1996 $

1e. Comprehensive Studies, Washington, Duwamish/Green River (Cont'd)

temperatures are also minimizing the effectiveness of what limited habitat remains. This degradation has caused a significant subsequent reduction in the number of fish and wildlife being produced or residing in the basin. What once was a natural fishery that supported millions of chum, chinook, pink salmon and steelhead is in jeopardy. These runs have the potential to be listed under the Endangered Species Act. The degradation of this habitat along with other rivers in the area are partially responsible for a significant reduction in the anadromous fishery resources in the Puget Sound area. A comprehensive plan for corrective measures is required to restore fish and wildlife habitat. The goal of the proposed resource project would be to improve the habitat of the Green/Duwamish Rivers to try and restore the fishery to its historic numbers. The Green/Duwamish Basin also lies on the North American Flyway and the restoration of migratory bird habitat in this basin has been identified under the Pacific Coast Joint Venture Strategic Plan. King County has expressed interest in sponsoring this study and understands the cost sharing requirements.

The current state of the anadromous fishery in the Green/Duwamish Basin and in Puget Sound makes it essential to work toward habitat restoration in this and other Puget Sound basins as soon as possible. The Green River basin is included in President Clinton's option nine of the Forest Management Plan and is in keeping with the Administration's policy of habitat restoration. This proposal offers a unique opportunity of total watershed planning and restoration. The potential to bridge restoration efforts in the upper watershed under the Forest Ecosystem Management Assessment Team (FEMAT) with the lower watershed critical estuary should not be overlooked. This restoration effort offers a tremendous opportunity to establish partnerships with other Federal, state and local agencies. Additional habitat restoration partnering opportunities could occur with integration with the Natural Resource Damage Assessment program ongoing in the lower Duwamish. Over ten million dollars have been targeted for restoration of aquatic habitat. This would also increase funding opportunities and further the intent of the Endangered Species Act and Migratory Bird treaty.

Fiscal Year 1996 funds will be used to initiate a reconnaissance study of the Duwamish/Green River basin. The study will focus on preliminary investigation of alternatives for habitat restoration and costs and benefits determined. The reconnaissance report is scheduled for completion in December 1996, which is 12 months after the initiation of the study. The reconnaissance phase is scheduled for completion in May 1997.

Study	Total Estimated Federal Cost $	Allocation Prior to FY 1995 $	Allocation FY 1995 $	Tentative Allocation FY 1996 $	Additional to Complete After FY 1996 $
1e. Comprehensive Studies, Washington (Cont'd)					
Stillaguamish River	400,000	0	0	200,000	200,000

The Stillaguamish River basin is confined to southwestern Skagit County and northwestern Snohomish County about 20 miles northeast of Everett and it flows into Puget Sound. Approximately one-third of the upper basin lies in Skagit County and the remainder in Snohomish County. The Stillaguamish basin is one of the smaller valley systems in the Puget Sound area and drains an area of 685 square miles. Its principal tributaries are the North Fork Stillaguamish and the South Fork Stillaguamish. Historically, a significant amount of wetlands and fish and wildlife habitat in the Stillaguamish River basin have been degraded or destroyed through a number of actions including impacts from a Federally constructed revetment and river straightening project that was constructed in the lower part of the basin. As a consequence, significant amount of the original aquatic habitat in the estuary has been lost. These habitats are critical in providing for feeding and refuge areas for juvenile salmonids, as well as providing a needed water quality component for minimizing upstream impacts associated with forest practices. The loss of these types of habitats may be one of the limiting factors responsible for a significant reduction in the anadromous fishery resources in the Puget Sound area. This degradation has caused a significant reduction in the number of fish and wildlife being produced or residing in the basin. The current fish runs on the Stillaguamish River include several wild runs of Coho, Chinook, and Pink salmon and winter and summer runs of Steelhead and Bulltrout. Several of these species have been proposed as threatened under the Endangered Species Act. The summer and fall Chinook and the Coho runs on the Stillaguamish are significantly depressed and fishing on these stocks has been eliminated because escapement goals have not been reached. The historic runs estimated to once number in the millions have now been closed to commercial fishing. The reconnaissance study would evaluate measures to restore the amount and function of intertidal aquatic habitat in the river to restore the fishery to a non-threatened status. The Stillaguamish basin also lies on the Pacific Flyway and attracts large numbers of migratory waterfowl. The Stillaguamish River Estuary has been designated as a target area for the restoration of migratory bird habitat in this basin in the Strategic Plan of the Pacific Coast Venture, Washington Steering Committee of the North Americal Waterfowl Management Plan. Several parcels near the mouth of the river have been targeted for acquisition by the Joint Venture. Snohomish County has expressed interest in sponsoring this study, and has indicated an intent to share equally the cost of the feasibility study phase that may follow the reconnaissance study.

Study	Total Estimated Federal Cost $	Allocation Prior to FY 1995 $	Allocation FY 1995 $	Tentative Allocation FY 1996 $	Additional to Complete After FY 1996 $

1e. Comprehensive Studies, Washington, Stillaguamish River (Cont'd)

The current threatened status of the anadromous fishery in the Stillaguamish basin and in Puget Sound make it essential to work toward habitat restoration in this and other Puget Sound basins as soon as possible. The Stillaguamish basin is included in President Clinton's option nine of the Forest Management Plan and this proposal is in keeping with the Administration's policy of habitat restoration, offering a unique opportunity for total watershed planning and restoration. The potential to bridge restoration efforts in the upper watershed under the Forest Ecosystem Management Assessment Team (FEMAT) with the lower watershed critical estuary should not be overlooked. This restoration effort offers a tremendous opportunity to establish partnerships with other Federal, state, and local agencies. It would also increase funding opportunities and further the intent of the Endangered Species Act and Migratory Bird treaty.

Fiscal Year 1996 funds would be used to initiate a reconnaissance study of the Stillaguamish basin. The study will focus on preliminary investigation of alternative measures for fish and wildlife habitat restoration. The reconnaissance report is scheduled for completion in September 1996, which is 12 months after initiation of the study. The reconnaissance phase is scheduled for completion in March 1997.

1f. Project Review Studies

WASHINGTON

Mount St. Helens Environmental Restoration	400,000	0	0	15,000	385,000

The Mount St. Helens Environmental Restoration study area would encompass the Cowlitz and Toutle Rivers from Spirit Lake at the base of Mount St. Helens to the confluence of the Cowlitz with the Columbia River (River Mile 68), approximately 55 miles downstream from Portland. Affected areas to be addressed include portions of these rivers, their tributaries and adjacent upland, riparian, and wetland habitats. The primary purpose of this restoration would be to address the approximately 6,000 acres of wetland, riverine, riparian and upland habitats lost or altered due to the Corps recovery efforts associated with the Mount St. Helens eruption in 1980. Sediment retention structures, sediment stabilization basins, and dredged material disposal sites have served to block anadromous fish passage, and destroy riverine spawning

Study	Total Estimated Federal Cost $	Allocation Prior to FY 1995 $	Allocation FY 1995 $	Tentative Allocation FY 1996 $	Additional to Complete After FY 1996 $

1f. Project Review Studies, Washington, Mount St. Helens Environmental Restoration (Cont'd)

and rearing areas. Placement of dredged material to an average depth of 15 feet, has impacted approximately 1,000 acres of wetland and riparian habitats. Recovery efforts have adversely affected hydrology, vegetative reestablishment, and fish and wildlife community recovery in the project area. Recovery of these habitats and fish and wildlife resources to pre-eruption conditions is unattainable without restoration actions to address impacts of constructed features. Based on discussions with Cowlitz County, Washington, it is anticipated that the county will be the study sponsor. They are aware of the cost sharing responsibilities contained in the Water Resources Development Act of 1986, and have indicated an intent to share equally in the feasibility phase study cost that may follow the reconnaissance study.

Fiscal Year 1996 funds will be used to initiate the reconnaissance phase. The reconnaissance report is scheduled for completion in September 1997, which is 12 months after initiation of the study. A completion date is being determined for the reconnaissance phase.

2. SURVEYS - CONTINUING

2a. Navigation Studies:

ALASKA

Anchor Point Harbor	600,000	142,000	168,000	208,000	82,000

Anchor Point is a community of 1700 persons located 250 miles Southwest of Anchorage on the Kenai Peninsula. The economy is based on commercial fishing and tourism. Anchor Point is located in the Kenai Peninsula Borough and is pursuing incorporation as a city. The State of Alaska may, however, be the local sponsor. This area is one of the most productive commercial and sport fishing locations on the Kenai Peninsula. Halibut and salmon are the target species. It is used extensively as a staging area during May and June. The existing unimproved launch sites at Anchor Point are crowded and dangerous. Commercial and sport fishermen launch their boats directly into the surf or in the Anchor River. This is unsafe and there are many cases of vehicles being swamped by the waves and tide. Many commercial and charter boats must launch at Homer, 15 miles to the southeast and then travel to Anchor Point to fish. Several lives have been lost because of the inability of rescue vessels to respond expeditiously to boats in distress. Benefits of a small boat

Study	Total Estimated Federal Cost $	Allocation Prior to FY 1995 $	Allocation FY 1995 $	Tentative Allocation FY 1996 $	Additional to Complete After FY 1996 $

2a. Navigation Studies, Alaska, Anchor Point Harbor (Cont'd)

harbor and launch facility are about $1 million annually and would accrue to the commercial fleet, the charter fleet, and to the recreational and subsistence fleets. There would also be Harbor of Refuge benefits. The commercial and charter fleets would benefit from reduced travel time to the fishing grounds. The charter and recreational/subsistence fleets would also benefit from reduced launching time, and reduced damages during launching. The citizens of Anchor Point and the State understand the cost sharing provisions of the Water Resources Development Act of 1986. The Alaska Department of Transportation and Public Facilities has budgeted funds for the local share of the feasibility study and would be the likely sponsor for that phase while Anchor Point is pursuing incorporation.

Fiscal Year 1995 funds are being used to complete a reconnaissance phase and if reconnaissance report is in accord with policy, to continue into the feasibility study. Fiscal Year 1996 funds will be used to continue the feasibility study. The preliminary estimated cost of the feasibility phase is $800,000, which is to be shared on a 50-50 percent basis by Federal and non-Federal interests. Up to one half of the non-Federal share may be in-kind services.

A summary of study cost sharing is as follows:

Total Estimated study cost	$ 1,000,000
Reconnaissance Phase (Federal)	200,000
Feasibility Phase (Federal)	400,000
Feasibility Phase (Non-Federal)	400,000

The reconnaissance phase is scheduled for completion in July 1995. The feasibility study is scheduled for completion in September 1997.

Cook Inlet	1,026,000	856,000	100,000	70,000	0

Southcentral Alaska, which contains 2/3 of the States' population, is the hub of economic activity. Interims under Southcentral Deep Draft Navigation have been completed for Kodiak and Anchorage. However, the Cook Inlet area has become increasingly active as a focal point for navigation planning and development. The three boroughs bordering the inlet have shown strong interest in port development and in planning for a Cook Inlet marine highway system. The recent

2a. Navigation Studies, Alaska, Cook Inlet (Cont'd)

emphasis on Alaskan resource development has prompted increased Cook Inlet area activity including: a) the appointment of a port commission and the hiring of a port director for the development of a port facility at Point MacKenzie by the Matanuska-Susitna Borough; and plans to develop an iron ore brickets plant for shipment from this port; b) the proposed plan for development of a coal handling terminal next to the Port of Anchorage, (This could effect the current $2 million amount of annual Federal dredging at the existing port. Several hundred thousand dollars have been spent on engineering data collection.); c) the completed construction of an additional dock by Anchorage for the transshipment of petroleum products which requires annual dredging to maintain its full potential; d) the planning of the Alaska Railroad to move their yards to Eagle River, in part to allow expansion of the existing Anchorage port facilities; and e) the Coast Guard plans to relocate major navigation aids in upper Cook Inlet for safer passage through shoal areas.

This study is expected to result in navigation improvements for specific sites in the tri-borough area. By letters of February, April, and May 1989, Anchorage and the two boroughs expressed willingness to meet their cost sharing responsibilities based on the Water Resources Development Act of 1986. The comprehensive plan will provide for the scheduling and construction of channel improvements and port facilities in an efficient and cost effective manner. Jurisdictional, administrative, or political constraints to plan development will be identified and recommendations for remedial action made. Technical evaluation will include engineering analysis of currents and shoaling that result from one of the highest tidal energy environments in the world. Economic evaluations of potential channel improvements for new or relocated port facilities will also be done. Cook Inlet serves as the vital transportation corridor for most of Alaska's bulk cargo and has the potential to enable export of processed iron ore briekets, coal, and other natural resources on a world class scale.

Fiscal Year 1995 funds are being used to continue the feasibility study. Fiscal Year 1996 funds will be used to complete the feasibility study. Engineering, economic, and environmental analysis of dredging a channel through Knik Arm Shoal will be completed. The estimated cost of the feasibility phase is $812,000 which is to be shared on a 50-50 percent basis by Federal and non-Federal interests. Up to one-half of the non-Federal share may be in-kind services.

A summary of the study cost sharing is as follows:

APPROPRIATION TITLE: General Investigations, Fiscal Year 1996 North Pacific Division

Study	Total Estimated Federal Cost $	Allocation Prior to FY 1995 $	Allocation FY 1995 $	Tentative Allocation FY 1996 $	Additional to Complete After FY 1996 $

Total Estimated Study Cost	$1,432,000
Reconnaissance Phase (Federal)	620,000
Feasibility Phase (Federal)	406,000
Feasibility Phase (non-Federal)	406,000

The feasibility study is scheduled for completion in January 1996.

Study	Total Estimated Federal Cost $	Allocation Prior to FY 1995 $	Allocation FY 1995 $	Tentative Allocation FY 1996 $	Additional to Complete After FY 1996 $
Northern Sea Route	1,500,000	320,000	252,000	100,000	828,000

The study area includes all coastal areas of Alaska, with emphasis on southcentral, western, and arctic Alaska. Economic and shipping data from the Pacific Northwest and nations of the Arctic and Europe will also be required. Alaska's coastline and Exclusive Economic Development Zone along the Chukchi and Beaufort Seas place the United States among the 8 nations bordering the Arctic Ocean. The other nations are Russia, Finland, Sweden, Norway, Denmark, Iceland, and Canada. The nations of the Arctic, through a variety of forums, are pursuing the enhancement of mutual trade via the Arctic Ocean, otherwise known as the Northern Sea Route. The dissolution of the U. S. S. R. and friendlier relations with Russia make the prospect of U. S. trade with northern Russia, Scandanavia, and Europe via the Northern Sea Route a credible alternative to present constraints. Alaska's trade is now limited to North Pacific Rim region, with only modest trade by air cargo with Europe. Alaska and Pacific Northwest states could gain valuable new markets in Europe through use of the Northern Sea route, now plied regularly by Russian ice-breakers leading convoys of ice-strengthened cargo ships. Commercial ice-breakers are mostly foreign ships with widely varying dimensions, cargo capacities, and operational capabilities. The availability and costs of ships suitable for export of Alaskan or Pacific Northwest cargoes via the Northern Sea Route cannot be determined from any consolidated source. Seasonal constraints related to vessel capabilities and ice conditions along the route are unclear. Kodiak and Unalaska are potential transshipment points where cargo from the western United States, Canada and the Orient would be transferred to ice strenghened vessels for the Northern Sea Route journey. These Alaskan ports need channel improvements, and increased cargo handling capacity to enable their participation in Northern Sea Route trade. Alaska's Bering Sea, Chukchi Sea, and Beaufort Sea ports have seasonal icing which may be controllable in ways which could extend their access to ships bound for Europe via the Northern Sea Route. The State of Alaska, Department of Commerce and Economic Development requested a study of the feasibility of federal navigation improvements to facilitate U. S. trade along the Northern Sea Route. The State understands that cost-sharing of feasibility studies and construction is required and has indicated willingness to pursue funding.

Study	Total Estimated Federal Cost $	Allocation Prior to FY 1995 $	Allocation FY 1995 $	Tentative Allocation FY 1996 $	Additional to Complete After FY 1996 $
2a. Navigation Studies, Alaska, Northern Sea Route (Cont'd)					

Fiscal Year 1995 funds are being used to complete a regional reconnaissance report and initiate its Washington-level review. The report will summarize all existing constraints to U. S. trade via the Northern Sea Route with a view toward navigation improvements which will render this trade to be safer, more efficient, and more profitable to U. S. exporters and maritime interests. The expertise of the Cold Regions Research and Engineering Laboratory and Corps experience with ice navigation on the Great Lakes will be brought to bear on these challenges. The reconnaissance report is scheduled for completion in June 1995, which is 18 months after initiation of the study. The international scope and diffuse nature of critical information require this time and the funding specified above to reach reconnaissance-level conclusions and recommendations. If the reconnaissance report is certified to be in accord with policy, the funds requested for Fiscal Year 1996 will be used to initiate the feasibility study. The preliminary estimated cost of the feasibility phase is $1,800,000, which is to be shared on a 50-50 percent basis by Federal and non-Federal interests. Up to one half of the non-Federal share may be in-kind services.

A summary of study cost sharing is as follows:

Total Estimated Study Cost	$2,400,000
Reconnaissance Phase (Federal)	600,000
Feasibility Phase (Federal)	900,000
Feasibility Phase (non-Federal)	900,000

The reconnaissance phase is scheduled for completion in November 1995. A completion date is being determined for this feasibility study.

St. Paul Harbor	500,000	98,000	152,000	100,000	150,000

St. Paul is the northernmost of the Pribilof Islands, located in the southeastern Bering Sea approximately 800 air miles west southwest of Anchorage. The Pribilof Islands are located in the middle of the extensive Bering Sea fisheries for groundfish and crab. A federally authorized harbor was constructed at St. Paul in 1989 by the city of St. Paul under authority Section 204 (e) of the 1986 WRDA, in which the city was reimbursed for the Federal share after construction was completed. The project consists of two breakwaters and a dredged maneuvering channel. It provides shelter for

Study	Total Estimated Federal Cost $	Allocation Prior to FY 1995 $	Allocation FY 1995 $	Tentative Allocation FY 1996 $	Additional to Complete After FY 1996 $

2a. Navigation Studies, Alaska, St. Paul Harbor (Cont'd)

Bering Sea commercial fishing vessels seeking harbor services or delivering their catches at St. Paul Island. Vessels delivering consumer goods and industrial supplies also use cargo transfer facilities protected by the breakwaters. The inner breakwater also serves to prevent some longshore transport of sediments into the harbor. Harbor use has been much greater than anticipated due to several processing plants moving in to receive the vessels' catches. Because of the increased traffic, the city of St. Paul has requested that the Federal entrance channel be enlarged. The city of St. Paul is the local sponsor and understands the cost-sharing needed for the feasibility study and construction as required by the 1986 Water Resources Development Act.

Fiscal Year 1995 funds are being used to complete the reconnaissance phase, which will include an economic evaluation of extending the Federal entrance channel approximately 500 feet within the harbor interior. If the reconnaissance report is certified to be in accord with policy, Fiscal Year 1996 funds will be used to continue into the feasibility study. The preliminary estimated cost of the feasibility phase is $500,000, which is to be shared on a 50-50 percent basis by Federal and non-Federal interests. Up to one half of the non-Federal share may be in-kind services.

A summary of study cost sharing is as follows:

Total Estimated Study Cost	$750,000
Reconnaissance Phase (Federal)	250,000
Feasibility Phase (Federal)	250,000
Feasibility Phase (Non-Federal)	250,000

The reconnaissance phase is scheduled for completion in September 1995. A completion date is being determined for the feasibility study.

Study	Total Estimated Federal Cost $	Allocation Prior to FY 1995 $	Allocation FY 1995 $	Tentative Allocation FY 1996 $	Additional to Complete After FY 1996 $
OREGON					
Columbia River Navigation Channel Deepening Study	4,228,000	1,903,000	293,000	900,000	1,132,000

Lower Columbia River ports have been the primary shipping point for West Coast grain and feed grain exports for many years. More than 33 million tons of commerce valued at $9 billion were shipped to or from Lower Columbia River ports in 1990. Increasing trade between the Pacific Northwest states and the Pacific Rim nations has accentuated the need for a deepened navigation channel in the Lower Columbia River, to accommodate larger, deeper-draft vessels. The existing authorized 40-foot channel depth restricts larger bulk carrier vessels to partial loading, or to delay sailing until the right combination of river flow and tides exist. For these reasons, a coalition of the Lower Columbia River Ports (the Ports of Portland, Astoria, and St. Helens in Oregon, and Vancouver, Kalama, Longview, and Woodland in Washington) have requested a study be conducted to evaluate the potential for deepening the navigation channel. This would allow deeper draft vessels to sail safely with fewer delays thereby reducing commodity movement costs. In a letter dated 17 January 1990, representatives from the Lower Columbia Ports coalition supported the reconnaissance phase study and stated that they were willing to comply with the cost sharing requirements of the Water Resources Development Act of 1986. The Reconnaissance Report was approved on 14 August 1992, and released for public distribution on 19 October 1992. In a letter dated 22 April 1994, the ports have indicated that they would participate in the feasibility study. The Feasibility Cost Sharing Agreement (FCSA) was signed on 21 June 1994, and the feasibility study initiated in July 1994. The local sponsor for the feasibility study will officially be the Port of Portland. The Port has enacted third party agreements with the remaining five Lower Columbia Ports to establish their roles and financial support of the feasibility study. The study area begins at the mouth of the Columbia River and extends upstream to the vicinity of the Port of Vancouver, Washington (approximately river mile 105), and also includes the Lower Willamette River from its confluence with the Columbia River (river mile 101.5) upstream to the vicinity of the Port of Portland, Oregon (approximately river mile 11).

Fiscal Year 1995 and Fiscal Year 1996 funds will be used to continue the feasibility study. The estimated cost of the feasibility phase is $6,100,000, which is to be shared on a 50-50 percent basis by the Federal and non-Federal interests. Up to one half of the non-Federal share may be in-kind services.

A summary of study cost sharing is as follows:

Study	Total Estimated Federal Cost $	Allocation Prior to FY 1995 $	Allocation FY 1995 $	Tentative Allocation FY 1996 $	Additional to Complete After FY 1996 $
2a. Navigation Studies, Oregon, Columbia River Navigation Channel Deepening (Cont'd)					
Total Estimated Study Cost	$ 7,278,000				
Reconnaissance Phase (Federal)	1,178,000				
Feasibility Phase (Federal)	3,050,000				
Feasibility Phase (Non-Federal)	3,050,000				
A completion date is being determined for the feasibility study.					
2a. Navigation Studies					
WASHINGTON					
Puget Sound Confined Disposal Site(s)	1,350,000	0	252,000	98,000	1,000,000

The State of Washington Department of Ecology has verified the need for public multi-user disposal sites which can accommodate contaminated sediments from navigation projects and other sources. The lack of confined disposal sites is limiting maintenance dredging of Federal and non-Federal navigation projects. The widespread public attitude is for confined disposal sites which meet the needs of both Federal and non-Federal navigation projects and sediment clean-up for low and moderately contaminated dredged material. In May 1991, the U.S. EPA approved the 1991 Puget Sound Water Quality Management Plan as the Federal Comprehensive Conservation and Management Plan (CCMP) for Puget Sound. The CCMP calls for identification of contaminated sediment areas and subsequent clean-up of these areas. Because of recognized technical expertise, the Corps of Engineers Seattle District has been asked to undertake in partnership with the State of Washington, Puget Sound Water Quality Authority, U.S. EPA, and Puget Sound ports, further studies which could lead to establishment of public multi-user confined disposal sites on Puget Sound and thereby result in substantial navigation benefits.

The Washington Department of Ecology is aware of the cost-sharing requirements of Corps planning studies as set forth in WRDA 1986 (P.L. 99-662), as amended, and is prepared to share costs of the feasibility phase studies that may follow the reconnaissance study. Senator Slade Gorton, in a letter to ASA(CW) dated 13 January 1994, requested Corps involvement

Study	Total Estimated Federal Cost $	Allocation Prior to FY 1995 $	Allocation FY 1995 $	Tentative Allocation FY 1996 $	Additional to Complete After FY 1996 $

2a. Navigation Studies, Washington, Puget Sound Confined Disposal Site(s) (Cont'd)

in the study and expressed strong interest in environmentally safe disposal of contaminated sediments. By letter dated 28 March 1994, Dr. John Zirschky, Acting ASA(CW), expressed support for such involvement by the Corps.

Fiscal Year 1995 funds are being used to initiate the reconnaissance phase at full Federal expense. Fiscal Year 1996 funds will be used to complete the reconnaissance phase, and if the reconnaissance report is certified to be in accord with policy, continue into the feasibility phase of study. The preliminary estimated cost of the feasibility phase is $2.0 million which is to be shared on a 50-50 percent basis by Federal and non-Federal interests. Up to one half of the non-Federal share may be in-kind services.

A summary of study cost sharing is as follows:

Total Estimated Study Cost	$ 2,350,000
Reconnaissance Phase (Federal)	350,000
Feasibility Phase (Federal)	1,000,000
Feasibility Phase (non-Federal)	1,000,000

The reconnaissance report is scheduled for completion in November 1995, which is 12 months after initiation of the study. The reconnaissance phase is scheduled for completion in July 1996. A completion date is being determined for the feasibility study.

2b. Flood Damage Prevention Studies

OREGON

Columbia Slough	438,000	358,000	25,000	50,000	0

The study area is located north and east of Portland, Oregon, along the south bank of the Columbia River, near the confluence of the Willamette River. The Columbia Slough extends about 18 miles and drains 53 square miles of developed residential, commercial, and industrial land, in addition to agricultural land that is being developed and yielding.

Study	Total Estimated Federal Cost $	Allocation Prior to FY 1995 $	Allocation FY 1995 $	Tentative Allocation FY 1996 $	Additional to Complete After FY 1996 $

2b. Flood Damage Prevention Studies, Oregon, Columbia Slough (Con'td)

higher run-off to the system. Portions of the study area are protected against flooding in varying degrees from the Columbia River by a system of pumps and levees (Corps and non-Federal projects). The Columbia Slough currently has severe water quality problems and is in a degraded environmental condition. The past Corps flood control project changed the hydrology of the system, which contributed to the current degraded condition of the ecosystem. The City of Portland is conducting numerous studies in the Columbia Slough, and is required by EPA to eliminate discharge of combined sewer and stormwater runoff that now occurs.

The reconnaissance study is investigating measures to restore the ecosystem of Columbia Slough, with other potential purposes of water quality and flood control. The City of Portland has indicated a strong interest in sponsoring ecosystem restoration studies. They are aware of current cost sharing requirements for both studying the problem and constructing a potential project, and would be the likely sponsor. The City reaffirmed its study support by letter, dated December 2, 1991.

Fiscal Year 1995 funds are being used to continue the reconnaissance phase studies at full Federal expense, including development of the feasibility phase scope and schedule, and development of the Feasibility Cost Sharing Agreement with the City. Fiscal Year 1996 funds will be used to complete the reconnaissance phase.

A summary of study cost sharing is as follows:

Total Estimated Study Cost	$2,438,000
Reconnaissance Phase (Federal)	438,000
Feasibility Phase (Federal)	1,000,000
Feasibility Phase (Non-Federal)	1,000,000

The reconnaissance phase is scheduled for completion in September 1995. A completion date is being determined for the feasibility study.

Study	Total Estimated Federal Cost $	Allocation Prior to FY 1995 $	Allocation FY 1995 $	Tentative Allocation FY 1996 $	Additional to Complete After FY 1996 $
2b. Flood Damage Prevention Studies, Oregon, (con'td)					
Johnson Creek	1,384,000	460,000	54,000	200,000	670,000

Johnson Creek drains an area of 54 square miles in northwestern Oregon and empties into the Willamette River. The Johnson Creek flood plain encompasses about 2,000 acres almost all within urban growth boundaries of Gresham, Portland, and Milwaukie, Oregon. The maximum flood of record in December 1964 caused an estimated $2.2 million in damages under October 1990 prices and conditions of development. Johnson Creek floods almost annually, and for many years it has regularly damaged or threatened damage to heavily populated areas along its banks, especially in the southeast Portland metropolitan area. The situation has become more acute in recent years with increasing development in the drainage basin. Such growth has increased the potential for rapid run off. Flood effects include direct damages to homes and other facilities, lowering of property values, impassable roads, streambank erosion, and sediment deposition. Also, during dry periods, the water becomes odorous and a source of contamination. The project, authorized by Section 204 of the 1950 Flood Control Act, would substantially reduce flooding of urban industrial, commercial, and residential areas, and improve water quality during the low water season. The authorized project was not constructed because the previous sponsor, the Metropolitan Service District (an organization representing interests of various municipalities, including the City of Portland), was unable to obtain the cooperation of the several municipalities involved in the project. The present sponsor, the City of Portland, believes it will obtain that cooperation.

Fiscal Year 1995 funds are being used to complete the reconnaissance phase at full Federal expense and if the reconnaissance report is certified to be in accord with policy, to continue into the feasibility study. Fiscal Year 1996 funds will be used to continue the feasibility study. The preliminary estimated cost of the feasibility phase is $1,800,000, which is to be shared on a 50-50 percent basis by Federal and non-Federal interests. Up to one half of the non-Federal share may be in-kind services.

A summary of study cost sharing is as follows:

Total Estimated Study Cost	$2,284,000
Reconnaissance Phase (Federal)	484,000
Feasibility Phase (Federal)	900,000
Feasibility Phase (Non-Federal)	900,000

The reconnaissance phase is scheduled for completion in June 1995. A completion date is being determined for the feasibility study.

Study	Total Estimated Federal Cost $	Allocation Prior to FY 1995 $	Allocation FY 1995 $	Tentative Allocation FY 1996 $	Additional to Complete After FY 1996 $
2b. Flood Damage Prevention Studies, Oregon, (Cont'd)					
Middle Fork Willamette Fishery Restoration	450,000	0	25,000	350,000	75,000

The Willamette River Basin is located in northwestern Oregon and contains approximately 12,000 square miles. The basin is the most populated area in the state and is highly developed. During the last 40 years, 13 Corps' reservoirs have been constructed primarily to control floods, generate power, and provide water for navigation and irrigation. Secondary water use is to provide benefits through greater recreational opportunities and improved fish and wildlife habitat through flow augmentation. The State of Oregon, along with local interests, have requested that the Corps evaluate options which will enable anadromous fish to pass upstream and downstream through the three existing dams (Dexter, Lookout Point and Hills Creek Lakes) in the Middle Fork Willamette River system. When the dams were constructed, fish passage was not developed so the lost production capability for the areas upstream of the projects was mitigated through hatchery production. In recent years, Congressional interests, as well as the Northwest Power Planning Council, The Confederated Tribes of Coos, Lower Umpqua and Siuslaw Indians and State and Federal resource agencies have expressed their concerns about the depletion of anadromous fish populations, especially native runs. They have increased their demands that the Corps restore fish migration capabilities, reestablish native runs, and rebuild anadromous fish populations within the basin. Key components of the reconnaissance study would be the assessment of upstream fish habitats, the engineering and design of fish bypass structures and the modification of reservoir operations during heavy migration periods to accommodate juvenile downstream and adult upstream passage of anadromous fish. The Oregon Department of Fish and Wildlife has formally requested and strongly encourages that the Corps investigate technology and opportunities to provide fish passage at the above listed Corps dams. In addition, the State Legislature, with the passage of House Joint Memorial 5, has requested the U. S. Congress to direct and fund the Corps to study and install bypass facilities at those dams. The State of Oregon, through the Oregon Department of Fish and Wildlife, will be the study sponsor. They are aware of the cost sharing responsibilities contained in the Water Resources Development Act of 1986.

Fiscal Year 1995 funds are being used to initiate the reconnaissance phase at full Federal expense. Fiscal Year 1996 funds are being used to continue the reconnaissance phase. The reconnaissance report is scheduled for completion in September 1996, which is 12 months after initiation of the study. The reconnaissance phase is scheduled for completion in June 1997.

Study	Total Estimated Federal Cost $	Allocation Prior to FY 1995 $	Allocation FY 1995 $	Tentative Allocation FY 1996 $	Additional to Complete After FY 1996 $
2b. Flood Damage Prevention Studies, Oregon (Cont'd)					
South Santiam Fishery Restoration	425,000	195,000	195,000	35,000	0

The Willamette River Basin is located in northwestern Oregon and contains about 12,000 square miles. The basin is the most populated area in the state and is highly developed. During the last 40 years, 13 Corps' reservoirs have been constructed primarily to control floods, generate power, and provide water for navigation and irrigation. Secondary water use is to provide benefits through greater recreational opportunities and improved fish and wildlife habitat by flow augmentation. The State of Oregon, along with local interests, are requesting that the Corps evaluate options which will enable anadromous fish to pass upstream and downstream through the two existing dams (Foster and Green Peter Lakes) in the South Santiam River system. Fishery restoration could be realized with improved fish passage at Foster and Green Peter Lakes on the South Santiam River. Congressional interests, as well as the Northwest Power Planning Council and State and Federal resource agencies have expressed their concerns about the depletion of anadromous fish populations, especially native runs. They have increased their demands that the Corps restore fish migration capabilities, reestablish native runs, and rebuild anadromous fish populations within the basin, which has been adversely impacted by Corps projects since the 1960s. Key components of the reconnaissance study would be the assessment of upstream fish habitats, preliminary engineering and design of fish bypass structures and the modification of reservoir operations during heavy migration periods to accommodate juvenile downstream and adult upstream passage of anadromous fish. Due to the impending listing of winter steelhead and spring chinook salmon in the Willamette River System as endangered under the Endangered Species Act of 1973, as amended, the South Santiam fishery restoration project is becoming urgent. The Oregon Department of Fish and Wildlife formally requested and strongly encourages that the Corps investigate technology and opportunities to improve fish passage at the Foster and Green Peter Lakes. The State of Oregon, through the Oregon Department of Fish and Wildlife, would be the study sponsor. They are aware of the cost sharing responsibilities contained in the Water Resources Development Act of 1986.

Fiscal Year 1995 funds are being used to complete the reconnaissance report in July 1995 at full Federal expense. Fiscal Year 1996 funds will be used to complete the reconnaissance phase. The reconnaissance phase is scheduled for completion in January 1996.

2b. Flood Damage Prevention Studies, Oregon (Cont'd)

Study	Total Estimated Federal Cost $	Allocation Prior to FY 1995 $	Allocation FY 1995 $	Tentative Allocation FY 1996 $	Additional to Complete After FY 1996 $
Willamette River Basin Review Study	2,200,000	730,000	116,000	500,000	854,000

Willamette River Basin, containing an area of approximately 12,000 square miles, is located in northwestern Oregon. As the most populated area in Oregon, the basin is highly developed. Many miles of levees and channel improvements have been constructed for flood protection. During the last 40 years, 13 Corps' reservoirs have been constructed to control floods, generate power, and provide water for navigation and irrigation. Present problems include flood damages, which are still considerable; fish and wildlife conservation; municipal and industrial water supply; and development of additional recreation opportunities. In addition, projected irrigation development in the basin has not materialized at the rate previously envisioned, leaving considerable uncontracted water available for other vendible purposes. Local interests seek a re-examination of Corps' reservoirs with a view toward authorizing additional project purposes and modifying reservoir operation. The State of Oregon has expressed strong support for the study because of its desire to implement a new Comprehensive Waterways Management Plan for the basin. The State has developed a plan for cost sharing the feasibility phase. The feasibility phase of the study will concentrate on the basin-wide effects of potential changes in flood control, hydropower operation, downstream releases, and conservation storage resulting from potential modifications to the Corps' system of 13 reservoir projects.

Fiscal Year 1995 funds are being used to complete the reconnaissance phase and if the reconnaissance report is certified to be in accord with policy, to continue into the feasibility study. Fiscal Year 1996 funds will be used to continue the feasibility study. The preliminary estimated cost of the feasibility phase is $2,800,000, which is to be shared on a 50-50 percent basis by Federal and non-Federal interests. Up to one half of the non-Federal share may be in-kind services.

2b. Flood Damage Prevention Studies, Oregon, Willamette River Basin Review Study (Cont'd)

A summary of study cost sharing is as follows:

Total Estimated Study Cost	$3,600,000
Reconnaissance Phase (Federal)	800,000
Feasibility Phase (Federal)	1,400,000
Feasibility Phase (Non-Federal)	1,400,000

The reconnaissance phase is scheduled for completion in July 1995. A completion date is being determined for the feasibility study.

WYOMING

Study	Total Estimated Federal Cost $	Allocation Prior to FY 1995 $	Allocation FY 1995 $	Tentative Allocation FY 1996 $	Additional to Complete After FY 1996 $
Jackson Hole Restoration	1,733,000	725,000	150,000	270,000	588,000

Jackson Hole is an area within the floodplain of the Snake River, located in Teton County near the towns of Moose and Jackson, Wyoming. The area is very scenic and popular for tourism, especially skiing during the winter season.

In March 1954, Congress authorized comprehensive studies of flooding and other water resource problems throughout the Snake River Basin in Idaho and Wyoming. Subsequent studies, conducted under the Upper Snake River and Tributaries study authority, led to construction of 23 miles of continuous, revetted levees along the Snake River. The Jackson Hole project, a system of Federally-constructed levees, begins about 4 miles below the Snake River bridge near Moose and extends downstream to 4 miles below the Jackson-Wilson bridge and was completed in 1964. Many non-Federal levees were constructed in the Jackson Hole area in the 1960's as well. The resulting Federal/non-Federal levee system reduced flood damages to improvements and lands within Jackson Hole. However, the levees significantly reduced the floodplain, hydrologically cutting off river flows and sediments to adjacent wetlands and other habitat supporting important fish and wildlife resources in Jackson Hole area.

Study	Total Estimated Federal Cost $	Allocation Prior to FY 1995 $	Allocation FY 1995 $	Tentative Allocation FY 1996 $	Additional to Complete After FY 1996 $

2b. Flood Damage Prevention Studies, Wyoming, Jackson Hole Restoration (Con'td)

In 1961, the Corps initiated the Snake River in Wyoming Interim Flood Control Study under the broad authority of the 1954 Congressional study resolution. The study purpose was to determine if further Federal improvements for flood control are needed in the Jackson Hole area. Several subsequent investigations have been conducted, but due to lack of economic justification, and subsequent legislation directing the Corps to assume maintenance of all levees in the Jackson Hole area, the interim study has never been competed and no additional Federal levee projects have been constructed. The Water Resources Development Act of 1986, Section 840, directed the Corps of Engineers to assume responsibility for maintenance and operation of levees in the Jackson Hole area. This was accomplished in September 1990, following completion of an Environmental Impact Study and Record of Decision. The U.S. Fish and Wildlife Service in their Coordination Act Report, dated April 1990, identified over 500 acres of gravel stream bed, 700 acres of riparian cottonwood habitat and 800 acres of riparian shrub-willow habitat that has been lost since initial construction of the levees in 1957. Overall, this habitat loss will continue to result in a major reduction in the diversity of the Upper Snake River floodplain ecosystem. In June 1990, the Senate Committee on Environment and Public Works authorized the Corps to study fish and wildlife impacts resulting from the Jackson Hole project.

The current study is responding to June 1990 Congressional directive, as well as the need to complete earlier flood control investigations conducted under the Snake River in Wyoming Interim Study. In 1993, Teton County and other local interests requested the Corps combine all ongoing General Investigations studies in the Jackson Hole area into a single, comprehensive study, and are highly supportive of this action. This study has determined the extent of impacts to fish and wildlife resources resulting from the existing Federal levee project and identified opportunities for habitat restoration, as well as the need for additional flood control improvements in the Jackson Hole area. The Feasibility Cost Sharing Agreement is scheduled to be executed between Teton County and the Walla Wall District in March 1995.

Fiscal Year 1995 funds are being used to complete reconnaissance phase and initiate the feasibility study. Fiscal Year 1996 funds will be used to continue the feasibility study. The preliminary estimated cost of the feasibility phase is $1,916,000, which is to be shared on a 50-50 percent basis by Federal and non-Federal interests. Up to one-half of the non-Federal share may be in-kind services.

Study	Total Estimated Federal Cost	Allocation Prior to FY 1995	Allocation FY 1995	Tentative Allocation FY 1996	Additional to Complete After FY 1996
	$	$	$	$	$
Chief Joeseph Pool Raise	1,727,000	358,000	190,000	400,000	779,000

2b. Flood Damage Prevention Studies, Wyoming, Jackson Hole Restoration (Con'td)

A summary of study cost sharing is as follows:

Total Estimated Study Cost	$2,691,000
Reconnaissance Phase (Federal)	775,000
Feasibility Phase (Federal)	958,000
Feasibility Phase (non-Federal)	958,000

The reconnaissance phase is scheduled for completion in March 1995. A completion date is being determined for this feasibility study.

2c. Shoreline Protection Studies - None

2d. Special Study

WASHINGTON

The project is located on the Columbia River in North Central Washington State. The study will investigate a pool raise at an existing hydroelectric dam for the purpose of generating additional electrical energy The Colville Confederated Tribes are the sponsors of the study. The Colville Indian Reservation borders to the north of the project. Since Chief Joseph dam is an existing Federal project, the power would be marketed by the Bonneville Power Administration. The proposed study will concentrate on determining the optimum pool raise for power production and appropriate compensation for the project sponsor. Reconnaissance studies indicate a significant potential for additional generation without significant environmental impacts or impacts to the generation capacity of Grand Coulee Dam (next project upstream). The feasibility cost sharing agreement was signed on 18 August 1994.

Study	Total Estimated Federal Cost $	Allocation Prior to FY 1995 $	Allocation FY 1995 $	Tentative Allocation FY 1996 $	Additional to Complete After FY 1996 $

2d. Special Study, Washington, Chief Joeseph Pool Raise (Cont'd)

Fiscal Year 1995 funds and requested Fiscal Year 1996 funds will be used to continue the Feasibility Study. The estimated cost of the feasibility phase is $2,578,000, which is to be shared on a 50-50 percent basis by Federal and non-Federal interests. Up to one-half of the non-Federal share may be in-kind services.

A summary of study cost sharing is as follows:

Total Estimated Study Cost	$3,106,000
Reconnaissance Phase (Federal)	348,000
Feasibility Phase (Federal)	1,379,000
Feasibility Phase (non-Federal)	1,379,000

The reconnaissance phase was completed in August 1994. A completion date is being determined for the feasibility study.

2e. Comprehensive Studies - None

2f. Project Review Studies

WASHINGTON

Howard Hanson Dam, Additional Storage	2,225,000	1,090,000	335,000	400,000	400,000

Howard A. Hanson Dam is an existing Federal earthfill and concrete dam which provides winter flood control and summer low-flow enhancement. The project was completed by the Corps of Engineers in 1962 and is located on the Green River about 35 miles southeast of Seattle and about 35 miles due east of Tacoma in King Count, Washington. Earlier studies have indicated that there is an opportunity to significantly increase summer water storage at the reservoir to provide needed municipal water supply enhance anadromous fish, and to a lesser degree improve downstream recreation. The

Study	Total Estimated Federal Cost $	Allocation Prior to FY 1995 $	Allocation FY 1995 $	Tentative Allocation FY 1996 $	Additional to Complete After FY 1996 $

2f. Project Review Studies, Washington, Howard Hanson Dam, Additional Storage (Cont'd)

severe 1987 drought and the recent 1992 drought in the Pacific Northwest, has intensified the need for additional sources of water supply in the rapidly growing Seattle-Tacoma urban area, and Howard Hanson Dam and Reservoir could provide a least-cost source of water to satisfy this demand. Changes to the dam and reservoir which are being studied include: modification of the drainage tunnel in the right dam abutment, clearing of reservoir vegetation that would be inundated, and construction of a new intake tower and tunnel for the fish passage/water temperature control facility.

The City of Tacoma entered into a Feasibility Cost Sharing Agreement with the Seattle District on 23 August 1990. Fiscal Year 1995 funds are being used to continue the feasibility study including finalize project outputs and further fish passage/water temperature control facility design.

Fiscal Year 1996 funds will be used to continue the feasibility study, particularly finalizing design, prepare/compile NEPA documentation, conduct Economic Analysis, and begin compiling feasibility report text. The estimate cost of the feasibility phase is $4.2 million, which is to be cost shared on a 50-50 percent basis by Federal and non-Federal interests.

A summary of study cost sharing is as follows:

Total Estimated Study Cost	$4,325,000
Reconnaissance Phase (Federal)	125,000
Feasibility Phase (Federal)	2,100,000
Feasibility Phase (non-Federal)	2,100,000

A completion date is being determined for the feasibility study.

Study	Total Estimated Federal Cost $	Allocation Prior to FY 1995 $	Allocation FY 1995 $	Tentative Allocation FY 1996 $	Additional to Complete After FY 1996 $
3. PRECONSTRUCTION ENGINEERING AND DESIGN ACTIVITIES - NEW					
3a. Navigation Studies - None					
3b. Flood Damage Prevention Studies - None					
4. PRECONSTRUCTION ENGINEERING AND DESIGN ACTIVITIES - CONTINUING					
4a. Navigation					
ALASKA					
Chignik Harbor	237,000	0	0	237,000	0

Chignik is located approximately 450 air miles southwest of Anchorage, Alaska on the south side of the Alaska Peninsula. One of Alaska's largest salmon fishing fleets converges on the Chignik area each year, but they have no protected harbor. Major storm damage occurs to commercial vessels that must currently raft at an existing fish processing dock.

Study	Total Estimated Federal Cost $	Allocation Prior to FY 1995 $	Allocation FY 1995 $	Tentative Allocation FY 1996 $	Additional to Complete After FY 1996 $

4a. Navigation, Alaska, Chignik Harbor (Cont'd)

The nearest harbor to Chignik is about 140 miles away and many local commercial fishermen must travel to Seattle to find safe winter moorage for their vessels. Detailed designs for a harbor at Chignik have been prepared under the Section 107 navigation authority of the 1960 River and Harbor Act. However, the costs of harbor construction are currently estimated at $10.7 million. The statutory Federal funding limit for a Section 107 project is $4 million, including costs of planning and design. Both the city of Chignik and the Alaska Department of Transportation and Public Facilities (ADOT/PF) believe the local cost share of $7.7 million for Section 107 project is beyond their ability to fund. If the project were authorized by Congress, in a Water Resources Development Act, cost sharing would be in accordance with the provisions of the Water Resources Development Act of 1986. Accordingly, the initial local cost share would be 10 percent of the general navigation facility costs, or about $1 million. This combined with the moorage system cost would yield a local share of $2.3 million which is achievable with State support. The estimated project benefits of $2 million annually are all for commercial navigation and produce a benefit-cost ratio of 1.9 based on the latest economic analysis dated December 1991. Therefore, both the city and ADOT/PF request completion of Preconstruction Engineering and Design for the project to be accomplished under the General Investigations Program.

Fiscal Year 1995 funds are being used to complete the feasibility study in October 1995 and initiate preconstruction engineering and design. Preconstruction engineering and design is scheduled for completion in April 1996.

Study	Total Estimated Federal Cost $	Allocation Prior to FY 1995 $	Allocation FY 1995 $	Tentative Allocation FY 1996 $	Additional to Complete After FY 1996 $
Kake Harbor	333,000	0	147,000	186,000	0

Kake, a community of 700, is located in Southeastern Alaska about 40 miles west of Petersburg and 800 miles northwest of Seattle. Commercial fishing and logging are the primary industries in the area. A feasibility report was completed in 1968, and the recommended project was authorized for construction. The authorized project, adjacent to the city, was estimated to cost $13.2 million in 1986 dollars. The project includes construction of two rubblemound breakwaters and dredging of an entrance channel and mooring basin with a design depth of 18 feet. The average annual benefits amount to $785 thousand, all for commercial navigation. The benefit to cost ratio is 1.5, based on the authorized interest rate. Expansion of an existing harbor at the Portage Cove site, located about 3 miles southeast of town, would have a benefit to cost ratio of 1.2 at the current interest rate. The city of Kake is the local sponsor, with financial support from

Study	Total Estimated Federal Cost $	Allocation Prior to FY 1995 $	Allocation FY 1995 $	Tentative Allocation FY 1996 $	Additional to Complete After FY 1996 $

4a. Navigation, Alaska, Kake Harbor (Cont'd)

the State. Detailed designs for the authorized harbor adjacent to Kake were completed in 1982, but the high cost of the required breakwaters could not be economically justified at the current interest rate used to evaluate Federal projects. A harbor site was considered at Portage Cove which offers better natural wave protection, but it was not acceptable to city residents at that time. The distance from Kake was a major problem for those residents who did not own vehicles, and no public transit system existed at that time. Since 1982 the State has expanded the moorage system in Portage Cove, and the city has improved its transportation system so most residents can easily get to Portage Cove. In January 1991, the Mayor of Kake requested a reevaluation of the Portage Cove harbor site. Additional harbor facilities at Portage Cove installed by the State are being severely damaged by wave action. This could result in failure of the mooring system and cause many fishing vessels to be damaged or destroyed. Kake and the Alaska Department of Transportation and Public Facilities would be the local sponsors, based on their letters of January and April 1991. They are willing and able to share costs in accordance with the Water Resources Development Act of 1986 to obtain harbor improvements vital to the community's economy. Both Kake and the State have given this project a high priority.

Fiscal Year 1995 funds are being used to initiate preconstruction engineering and design. Fiscal Year 1996 funds will be used to complete preconstruction engineering and design in September 1996.

4b. Food Control - None

4c. Shoreline Protection - None

4d. Multiple Purpose Power

OREGON

Coos Bay, OR (Deep Draft Navigation)	970,000	420,000	227,000	0 1/	323,000

Coos Bay, a major commercial navigation port on the Oregon Coast, is located about 200 miles south of the mouth of the Columbia River and 445 miles north of San Francisco Bay. From the 45-foot deep bar at the mouth to its upper end, the

Study	Total Estimated Federal Cost $	Allocation Prior to FY 1995 $	Allocation FY 1995 $	Tentative Allocation FY 1996 $	Additional to Complete After FY 1996 $

4d. Multiple Purpose Power, Oregon, Coos Bay (Deep Draft Navigation) (Cont'd)

bay is 15 miles long and averages 1,200 feet in width at low tide. Deep-draft commerce is diversified consisting of nickel ore, lumber, paper, plywood, logs, and wood chips and has averaged over five million tons per year since 1976. More recently, a $35 million facility has been constructed at the port and shipments have been initiated to receive nickel ore imports from New Caledonia, a French island in the South Pacific. The existing interior channel is 35 feet deep, varies in width from 300 to 400 feet, and is inadequate to accommodate world fleet vessels calling on the port. Vessel operating drafts are limited by existing channel depths, thereby, limiting calls by more efficient deeper draft vessels and causing vessels to transmit light-loaded and be delayed awaiting favorable tidal conditions for transit. The project sponsor will be the Oregon International Port of Coos Bay who has acknowledged the cost sharing requirements and has expressed its intent to meet these requirements, based on provisions in the Water Resource Development Act of 1986.

The feasibility report was completed and submitted to Congress in August 1994. The report recommended deepening the bar and the existing 15-mile channel by two feet to 47 and 37 feet, respectively. The construction cost estimate for this project is 14.6 million including $174,000 for local interests to dredge berthing areas and dock rehabilitation. The estimated average annual costs and benefits (October 1994 price levels) are $1.3 and $2.9 million, respectively. The benefit-to-cost ratio is 2.3 to 1. Project cost sharing will include requirements for non-Federal interests to pay 25 percent of the project cost during construction, and an additional 10 percent to be repaid over a period not exceeding 30-years.

Fiscal Year 1995 funds are being used to continue preconstruction engineering and design by completing the plans and specifications for the recommended channel deepening. Fiscal Year 1995 programmed carryover funds ($65,000) into Fiscal Year 1996 will be used for project coordination, and environmental monitoring.

1/ $65,000 of the amount available for Fiscal Year 1995 is scheduled as programmed carryover into Fiscal Year 1996.

Willamette River Temperature Control	2,750,000	0	419,000	1,000,000	1,331,000

The Willamette River Basin is located in northwestern Oregon and contains an area of approximately 12,000 square miles.

Study	Total Estimated Federal Cost $	Allocation Prior to FY 1995 $	Allocation FY 1995 $	Tentative Allocation FY 1996 $	Additional to Complete After FY 1996 $

4d. Multiple Purpose Power, Oregon, Willamette River Temperature Control (Cont'd)

During the last 40 years, 13 Corps reservoirs have been constructed in the basin to control floods, generate power and provide water for navigation, irrigation, improving water quality, recreation and fish and wildlife. State and Federal resource agencies including the Northwest Power Planning Council have been seeking modification of water temperatures downstream from two reservoirs, Blue River and Cougar Lakes, to achieve more beneficial temperatures for anadromous fish life under present flow conditions in the McKenzie River subbasin. Facilities are intended to restore fish and wildlife habitat by improving downstream water temperatures that may have been degraded by the existing Corps projects at Blue River and Cougar Lakes. Restoring pre-project temperatures will improve survival rates and increase populations of three important native fish species: the wildstock of Willamette spring chinook salmon, the bull trout (a critical species in Oregon), and the rainbow trout. These fisheries once provided important recreational and commercial benefits to the region. Justification for the project will be based on non-monetary fishery and other biological benefits.

Fiscal Year 1995 funds are being used to complete the feasibility study of temperature control modifications at Blue River and Cougar Lakes and initiate preconstruction engineering and design. The feasibility study is scheduled for completion in April 1995. The current estimated cost to install multi-level intake towers at the two projects is approximately $45 million, which would be initially funded at full Federal cost. The costs would be repaid according to the original allocation among project purposes. Fiscal Year 1996 funds will be used to continue preconstruction engineering and design. A completion date is being determined for the preconstruction engineering and design effort.

APPROPRIATION TITLE: Construction, General - Navigation - Channels and Harbors

PROJECT: Kodiak Harbor, Alaska (Continuing)

LOCATION: Kodiak is located in southcentral Alaska on the northeast shore of Kodiak Island.

DESCRIPTION: The project consists of an 1,865 foot rubblemound breakwater, with a 200 foot wide entrance channel through a gap in the breakwater. A 100 foot long rubblemound breakwater will be constructed adjacent to a 100 foot wide, 12 foot deep north entrance channel. The harbor will serve 90 acres of moorage.

AUTHORIZATION: Water Resources Development Act of 1986 (PL99-662) and as modified by the Water Resources Development Act of 1990 (PL 101-640).

REMAINING BENEFIT-REMAINING COST RATIO: 2.3 to 1.0 at 8-7/8 percent.

TOTAL BENEFIT-COST RATIO: The current benefit to cost ratio is 1.4 to 1.0 at 8-7/8 percent.

INITIAL BENEFIT-COST RATIO: 1.4 to 1.0 at 8-7/8 percent (FY 1991).

BASIS OF BENEFIT-COST RATIO: General Design Memorandum of July 1991 at October 1991 price levels.

SUMMARIZED FINANCIAL DATA:

Estimated Appropriation Requirement (CofE)			$15,454,000
Estimated Appropriation Requirement (U.S. Coast Guard)			15,000
Estimated Total Appropriation Requirement			15,469,000
Future Non-Fed Reimbursement			1,639,000
Estimated Federal Cost (Ultimate) (CofE)			13,815,000
Estimated Non-Fed Cost			3,434,000
Cash Contributions		$1,717,000	
Other		78,000	
Reimbursement		1,639,000	
Navigation	$1,639,000		
Total Estimated Project			$17,264,000

STATUS (1 January 95)	Percent Complete	Completion Schedule
Entire Project	35	SEP 96

Division: North Pacific District: Alaska Kodiak Harbor, Alaska SUMMARIZED FINANCIAL DATA (Continued)

		ACCUMULATED % OF EST. FED COST
Allocations to 30 September 1994	$ 5,990,000	
Conference Allowance for FY 1995	8,000,000	
Allocations for FY 1995	6,464,000 1/	
Allocations thru 1995	12,454,000	81

PHYSICAL DATA	Main	North Entrance
Breakwater Length (ft)	1,865	100
Entrance Channel Width (ft)	200	100

Allocations requested for FY 1996	3,000,000	100
Programmed Balance to Complete after FY 1996	0	
Unprogrammed Balance to Complete after 1996	0	

Depth (ft)	-20	-12
Mooring Area		
Total Area MLLW Depth	-20	
Acres	90	

1/ Reflects $1,266,000 savings and slippage, $270,000 reprogrammed from the project, and $2,000,000 in programmed carryover into FY 96.

JUSTIFICATION: The city of Kodiak is situated on the northeast shore of Kodiak Island in Southcentral Alaska. It is an active and growing island port whose economy is heavily dependent on commercial fishing. The port is a base for a major commercial fishing fleet and serves as a transshipment center for goods bound to and from communities scattered on Kodiak Island and the eastern Alaska Peninsula. The growth in the fishing fleet has far outstripped the capacity of the existing small boat harbor. As a result, numerous vessels, denied the protection of the basin, moor at various docks, create a serious fire hazard, and interfere with efficient operation of the docks and other boats. The lack of adequate protected moorage forces a large number of boats to travel great distances to find off-season storage berthing, resulting in damages to vessels and mooring facilities, and in frequent vessel moves. State and local interests constructed temporary harbor facilities in Dog Bay in 1982, but high winds and ocean swells have caused significant damage to the temporary mooring facilities and to the vessels. The average annual navigation benefits attributable to the project are currently estimated at $3,086,600.

Division: North Pacific District: Alaska Kodiak Harbor, Alaska FISCAL YEAR 1996: The total program amount, including the requested and programmed carryover amounts of $3,000,000 and $2,000,000, respectively, will be applied as follows:

Complete Fish and Wildlife	$ 150,000
Complete Breakwaters and Seawalls	4,450,000
Complete Construction Management	400,000
Total	$ 5,000,000

NON-FEDERAL COST: In accordance with the cost sharing and financing concepts reflected in the Water Resources Development Act of 1986, the non-Federal sponsor must comply with the requirements listed below.

Requirements of Local Cooperation	Payments During Construction and Reimbursements	Annual Operation, Maintenance, and Replacement Costs

Provide lands, easements, rights of way, and borrow and excavated or dredged material disposal areas.	$ 78,000
Pay 10 percent of the costs allocated to deep draft navigation during construction.	$1,717,000
Reimburse an additional 10 percent of the costs of general navigation features allocated to commercial navigation within a period of 30 years following completion of construction is partially reduced by a credit allowed for the value of lands, easements, rights of way, relocations. and dredged or excavated material disposal areas provided for commercial navigation.	$1,639,000
Total Non-Federal Costs	$3,434,000

The non-Federal sponsor has also agreed to make all required payments concurrently with project construction and reimburse its share of construction costs over a period not to exceed thirty years.

Division: North Pacific District: Alaska Kodiak Harbor, Alaska

STATUS OF LOCAL COOPERATION: The City Council of Kodiak, Alaska, has agreed to meet all requirements of local cooperation. A Letter of Assurance was transmitted to the Corps of Engineers on 11 December 1990. The Project Cooperation Agreement was signed on 11 Jun 1992. The city has $4 million already available for the non-Federal share of the project, and has submitted a financing plan for the remainder of the required funds.

COMPARISON OF FEDERAL COST ESTIMATE: The current Federal (Corps of Engineers) Cost Estimate of $15,454,000 is an decrease of $8,024,000 from the latest estimate ($23,478,000) presented to Congress (FY 1995). This change is due to a favorable bid on the main breakwater consolidation pad ($4,024,000) and a reduction in overall project contingencies ($4,000,000) based on current estimates.

STATUS OF ENVIRONMENTAL IMPACT STATEMENT AND COMPLIANCE WITH CLEAN WATER ACT:

a. The final supplemental environmental impact statement was submitted to EPA in March 1991.

b. The provisions of Section 404 of the Clean Water Act were met with the submission of the EIS including a Section 404 (b)(1) evaluation to Congress in July 1991.

OTHER INFORMATION: Funds to initiate preconstruction engineering and design were appropriated in FY 1988 and funds to initiate construction were appropriated in FY 1991.

A consolidation pad was placed during the initial construction contract. After an 18-month period, the upper portion of the breakwater will be constructed in a second contract.

Division: North Pacific District: Alaska Kodiak Harbor, Alaska

APPROPRIATION TITLE: Construction, General (Major Rehabilitation on Multiple-Purpose Power Projects)

PROJECT: Bonneville Powerhouse (Phase I - Transformers/Switchyard), Oregon and Washington (Continuing)

LOCATION: On the Columbia River 42 miles east of Portland, Oregon, along Interstate 84, between the states of Oregon and Washington.

DESCRIPTION: Replacement of transformers for 10 generating units and rehabilitation of switchyard.

AUTHORIZATION: National Recovery Act, 30 September 1933; River and Harbor Act, 74th Congress, 2nd Session, 30 August 1935; Public Law 329, 75th Congress, 20 August 1937 (Existing Project).

REMAINING BENEFIT - REMAINING COST RATIO: Not Applicable. The work is undertaken for system reliability, safety and environmental reasons.

TOTAL BENEFIT - COST RATIO: Not Applicable. The work is undertaken for system reliability, safety and environmental reasons.

INITIAL BENEFIT - COST RATIO: Not Applicable. The work is undertaken for system reliability, safety and environmental reasons.

BASIS OF BENEFIT - COST RATIO: Not Applicable.

SUMMARIZED FINANCIAL DATA			
Estimated Appropriation Requirement			$27,100,000
Future Non-Federal Reimbursement			$27,100,000
Estimated Federal Cost (Ultimate)			0
Estimated Non-Federal Cost			$27,100,000
Reimbursements		$27,100,000	
Power	$27,100,000		
Total Estimated Project Cost			$21,700,000

STATUS (1 JAN 1995)	PERCENT COMPLETE	COMPLETION SCHEDULE
Entire Project	27	Mar 1997

Division: North Pacific District: Portland Bonneville Powerhouse (Phase I), OR & WA (Major Rehab)

SUMMARIZED FINANCIAL DATA (Cont'd)

		Accum.% of Est Federal Cost
Allocations to 30 September 1994	$ 6,303,000	
Conference Allowance for FY 1995	6,900,000	
Allocation for FY 1995	5,808,000 1/	
Allocations through FY 1995	12,111,000	45
Allocation Requested for FY 1996	8,530,000	76
Programmed Balance to Complete after FY 1996	6,459,000	
Unprogrammed Balance to Complete after FY 1996	0	

1/ Reflects $1,092,000 reduction assigned as savings and slippage.

PHYSICAL DATA (EXISTING PROJECT)

Powerhouse: Number of generating units - 10
Total plant capacity - 531,630 kw

JUSTIFICATION: The Bonneville Powerhouse was dedicated on 28 September 1937. This powerhouse was the first of several multi-unit powerhouses constructed by the Corps of Engineers on the Columbia River System. It serves as an integral part of the Northwest Power Pool Transmission Grid and contributes nearly 5% of the total Corps of Engineer's output to the Bonneville Power Administration's (BPA) transmission System. The plant has ten Kaplan type main unit turbines, with a total rated capacity of 531,630 kW. The original design of the plant was primarily for base load operation. The plant is presently used both as a base load and peaking plant, and plays a key role in BPA's transmission system voltage regulation scheme for the greater Portland, Oregon area. The powerplant requires frequent and complex maintenance, resulting in increased maintenance costs and, more importantly, lost generating capability through unscheduled equipment outages. This can be partially attributed to the current operation of the powerhouse for peaking, rather than base load operation, which is beyond the conditions for which the equipment was designed to operate. Two main unit transformers have failed within the last five years. There are no remaining spares. Five different types of transformers of different vintage and manufacture are presently in use, which increases the difficulty of maintenance, reduces the ability to interchange spare parts, and reduces plant versatility during the occurrence of failures. Also, oil circuit breaker bushings have been found to have extremely high concentrations of PCB's. Two bushings have exploded, which posed a threat to the Columbia River but fortunately caused no injuries.

FISCAL YEAR 1996: The requested amount of $8,530,000 will be applied as follows:

Continue Powerhouse Rehabilitation	$7,548,000
Engineering and Design	232,000
Construction Management	750,000
Total	$8,530,000

STATUS OF LOCAL COOPERATION: None required for major rehabilitation.

NON-FEDERAL COST: Costs allocated to power, presently estimated at $27,100,000, are reimbursable. This project is a part of the Federal Columbia River power system. Bonneville Power Administration (BPA), the federal marketing agency, establishes system rate levels adequate to recover all capital investment cost for generating projects (including Corps generating projects) within 50-year period and to repay annual OM&R and interest expenses. BPA submits annual financial statements to Congress, as required by law, on repayment and periodically recommends rate adjustment as required for meeting repayment obligations.

COMPARISON OF FEDERAL COST ESTIMATE: The current federal cost estimate of $27,100,000 reflects an increase of $5,400,000 from the previous estimate ($21,700,0000) presented to Congress (FY 1995). This change includes the following items.

Item	Amount
Price Escalation on Construction Features	$ -1,024,000
Post Contract Award and Other Estimating Adjustments	6,424,000
Total	$ 5,400,000

STATUS OF ENVIRONMENTAL IMPACT STATEMENT: An Environmental Assessment (EA) and a Finding of No Significant Impact (FONSI) was finalized on 19 August 1991 for the Bonneville Powerhouse, Major Rehabilitation (Phase I) work.

OTHER INFORMATION:
Initial construction of the powerhouse was completed in 1943.

APPROPRIATION TITLE: Construction, General (Major Rehabilitation on Multiple-Purpose Power Projects)

PROJECT: Bonneville Powerhouse (Phase II - Main Unit), Oregon and Washington (Continuing)

LOCATION: On the Columbia River 42 miles east of Portland, Oregon, along Interstate 84, between the states of Oregon and Washington.

DESCRIPTION: Replace the windings of five generators and replacement of ten turbines for the generating units.

AUTHORIZATION: National Recovery Act, 30 September 1933; River and Harbor Act, 74th Congress, 2nd Session, 30 August 1935; Public Law 329, 75th Congress, 20 August 1937 (Existing Project).

REMAINING BENEFIT - REMAINING COST RATIO: 1.78 to 1 at 8.0 percent

TOTAL BENEFIT - COST RATIO: 1.66 to 1 at 8.0 percent

INITIAL BENEFIT - COST RATIO: 1.5 to 1 at 8-1/2 percent

BASIS OF BENEFIT - COST RATIO: Benefits are from the Evaluation Report submitted 15 March 1992 at March 1992 price levels.

SUMMARIZED FINANCIAL DATA			
Estimated Appropriation Requirement			$86,400,000
Future Non-Federal Reimbursement			$86,400,000
Estimated Federal Cost (Ultimate)			0
Estimated Non-Federal Cost			$86,400,000
Reimbursements		$86,400,000	
Power	$86,400,000		
Total Estimated Project Cost			$86,400,000

STATUS (1 JAN 1995)	PERCENT COMPLETE	COMPLETION SCHEDULE
Entire Project	1	Being Determined

SUMMARIZED FINANCIAL DATA (Cont'd)

		Accum. % of Est Federal Cost
Allocations to 30 September 1994	$ 862,000	
Conference Allowance for FY 1995	3,500,000	
Allocation for FY 1995	2,946,000 1/	
Allocations through FY 1995	3,808,000	4
Allocation Requested for FY 1996	7,000,000	12
Programmed Balance to Complete after FY 1996	75,592,000	
Unprogrammed Balance to Complete after FY 1996	0	

PHYSICAL DATA (EXISTING PROJECT)

Powerhouse: Number of generating units - 10
Total plant capacity - 531,630 kw

1/ Reflects $554,000 reduction assigned as savings and slippage, and $388,000 in programmed carryover into FY 96.

JUSTIFICATION: The Bonneville Powerhouse was dedicated on 28 September 1937. This powerhouse was the first of several multi-unit powerhouses constructed by the Corps of Engineers on the Columbia River System. It serves as an integral part of the Northwest Power Pool Transmission Grid and contributes nearly 5% of the total Corps of Engineer's output to the Department of Energy's (Bonneville Power Administration) transmission System. The plant has ten Kaplan type main unit turbines, with a total rated capacity of 531,630 kW. The original design of the plant was primarily for base load operation. The plant is presently used both as a base load and peaking plant. Current operation of the plant for peaking as well as balancing regional power load variations requires rapid control of generating units to compensate for changing load and voltage conditions. This imposes increased stress on the generating/power train components contributing to the most recent failures (specifically winding coil and blade failures). Moreover, the main operational constraints imposed to enhance fish migration result in more numerous unit starts and stops. Tests conducted by both Bonneville Power Administration and the Corps of Engineers personnel indicate slow voltage and system load restoration response. This work will increase the overall reliability and efficiency power generation of the powerhouse, and enhance downstream juvenile fish survival due to increased turbine efficiency. The power plant requires frequent and complex maintenance, resulting in increased maintenance costs and, more importantly, lost generating capability through unscheduled equipment outages. Five units have experienced winding failures and three units are currently operating at slightly reduced capacity because of coil failures. Also to be considered is the role which the Second Powerhouse plays in the operation of the first Powerhouse. Since 1983, operation of the Second Powerhouse has been restricted during juvenile fish migration periods (15 March through 15 November). Operation during this period has been as necessary to meet Firm Energy Carrying Capabilities, to conduct ongoing research, control total dissolved gas, or to maintain spill at or below 75,000 cfs during daylight hours.

Juvenile fish bypass improvements were installed at the Second Powerhouse prior to the 1993 juvenile fish migration season, however, operation of the Second Powerhouse is still restricted until such time as research demonstrates that juvenile survival through the Second Powerhouse and associated tailrace is greater than or equal to juvenile survival through the First Powerhouse and associated tailrace. The need for unit availability in the First Powerhouse when the Second Powerhouse cannot be operated is of great importance. Forced outages during these times can be especially costly.

FISCAL YEAR 1996: The total program amount, including the requested and programmed carryover amounts of $7,000,000 and $388,000, respectively, will be applied as follows:

Continue Powerhouse Rehabilitation	$6,191,000
Engineering and Design	428,000
Construction Management	769,000
Total	$7,388,000

STATUS OF LOCAL COOPERATION: None required for major rehabilitation.

NON-FEDERAL COSTS: Costs allocated to power, presently estimated at $86,400,000, are reimbursable. This project is a part of the Federal Columbia River power system. Bonneville Power Administration (BPA), the federal marketing agency, establishes system rate levels adequate to recover all capital investment cost for generating projects (including Corps generating projects) within 50-year period and to repay annual OM&R and interest expenses. BPA submits annual financial statements to Congress, as required by law, on repayment and periodically recommends rate adjustment as required for meeting repayment obligations.

COMPARISON OF FEDERAL COST ESTIMATE: The current federal cost estimate of $86,400,000 is a decrease of $100,000 from the latest estimate ($86,500,000) presented to Congress (FY 1995). This change is due to a decrease in the price escalation on construction features.

STATUS OF ENVIRONMENTAL IMPACT STATEMENT: An Environmental Assessment (EA) and a Finding of No Significant Impact (FONSI) was finalized on 6 March 1992 for the Bonneville Powerhouse, Major Rehabilitation (Phase II) work.

OTHER INFORMATION: Initial construction of the powerhouse was completed in 1943. The scheduled project completion date is being determined.

APPROPRIATION TITLE: Construction, General - Reservoirs (Flood Control)

PROJECT: Elk Creek Lake, Oregon (Continuing)

LOCATION: In Jackson County, on Elk Creek, a tributary of Rogue River, at river mile 1.7 about 26.5 miles north of Medford, Oregon.

DESCRIPTION: The Elk Creek Lake Project was authorized as one of three multiple-purpose dams in the Rogue River Basin. The three dams were designed to operate as a system to reduce flooding and to accomplish additional purposes of water supply, irrigation, fish and wildlife enhancement, hydropower, and recreation. Two of the three dams are complete and operating. Features of the partially completed Elk Creek Lake project include a 249-foot high, roller-compacted, concrete, gravity dam; a gate controlled concrete chute spillway; regulating outlet conduits; a diversion for power penstock; and a multiple use in-take tower attached to the upstream face of the dam. Based of the selected alternative described in final EIS Supplement Number 2, filed 1 May 1991; the project would be redesigned for interim operation with no conservation pool and with fish passage.

AUTHORIZATION: 1962 Flood Control Act

REMAINING BENEFIT - REMAINING COST RATIO: The remaining benefit-remaining cost ratio is 0.61 to 1 at the authorized rate of 3 1/4%.

TOTAL BENEFIT - COST RATIO: The total benefit-cost ratio is 0.36 to 1 at 3 1/4%.

INITIAL BENEFIT - COST RATIO: The benefit-cost ratio for the fiscal year for which Congress appropriated initial construction funds (FY 1971) was 1.01 to 1 at a 3 1/4% rate and was based on project's fair share of system benefits.

BASIS OF BENEFIT - COST RATIO: Benefits are from the latest available evaluation reported in June 1983 at 1983 price levels.

SUMMARIZED FINANCIAL DATA			STATUS (1 Jan 1995)	PERCENT COMPLETE	COMPLETION SCHEDULE
Estimated Federal Cost		$174,000,000[1]			
Programmed Construction	$108,351,000		Entire Project	72	Indefinite
Unprogrammed Construction	65,649,000				

[1] Reflects the cost of the selected alternative described in EIS Supplement Number 2. Excludes deferred costs for future potential modification to operate with a conservation pool.

Division: North Pacific District: Portland Elk Creek Lake, OR

SUMMARIZED FINANCIAL DATA (Cont'd)

				ACCUM. PCT. OF EST. FED COST
Estimated Non-Federal Cost			$ 0	
Programmed Construction		$ 0		
Cash Contributions	$ 0			
Other Costs	0			
Estimated Non-Federal Cost			0	
Unprogrammed Construction		0		
Cash Contributions	0			
Other Costs	0			
Total Estimated Programmed Cost			108,351,000	
Total Estimated Unprogrammed Cost			65,649,000	
Total Estimated Project Cost			174,000,000	
Allocations to 30 September 1994			107,430,000	
Conference Allowance for FY 1995			500,000	
Allocation for FY 1995			421,000[2]	
Allocations through FY 1995			107,851,000[3]	62%
Allocation Requested for FY 1996			500,000	62%
Programmed Balance to Complete after FY 1996			0	
Unprogrammed Balance to Complete after FY 1996			65,649,000	

PHYSICAL DATA

Dam: Type - Roller compacted concrete. Height - 249 feet; length - 2,580

Concrete Volume - 1,100,000 cu. yds.

Spillway: Type - Concrete gravity. Gate Ogee Section: Design discharge- 68,400 cfs, Gates - 3 (33 feet x 34 feet) tainter.

Lands and Damages: Acres - 3,570

Land Use: Irrigated - 130 acres; Pasture - 182 acres; Wooded - 3,151 acres (of which 841 acres are Government owned); Lesser Interests- 67 acres; Building Sites - 40 acres

Relocations: County Road - 7.9 miles Power and Telephone lines - 15 miles, Cemetery

Reservoir Capacity: Total storage at elev 1,726 - 101,000 acre feet; Usable Storage - 95,000 acre feet; Flood Control Storage (elev 1726-1665) - 60,000 acre feet; Conservation Storage (elev 1665-1581) - 35,000 acre feet; Inactive Storage (elev 1581-1500) - 6,000 acre feet.

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[2] Reflects $79,000 reduction assigned as savings and slippage.

[3] Includes $2,500,000 of FY 93 act language appropriations specifically for Engineering and Design of which reflects $1,602,000 in programmed carryover into FY 96.

JUSTIFICATION: Elk Creek Lake could be operated without conservation storage on an interim basis together with Lost Creek and Applegate Lakes as the three-dam Rogue River Basin system to provide flood control. The project would control run-off from about 132-square miles upstream from Elk Creek site. The flood problems occur principally in discontinuous areas in the 50-mile reach of the Rogue River from the junction of Elk Creek downstream to about ten miles past Grants Pass and in scattered areas in the lower 100-mile reach of the Rogue River. The major flood plain comprises some 7,400 acres of hay, alfalfa, pasture orchards (peaches, pears), and hops and affects a population of 14,560. Damages from past floods include agricultural crop losses and land damage due to inundation and erosion; and destruction of industrial, residential, commercial, and recreation developments. A total of 95,000 acre-feet of usable storage would be available at Elk Creek for flood control. The maximum flood that could be completely controlled at the Elk Creek site would have a peak flow of about 19,200 cubic feet per second and a frequency of occurrence of once in about 40 years. During the flood of 1964, the most severe flood since 1861, damages to the area downstream from Elk Creek and Lost Creek Lakes amounted to $13,161,000 of which about $2,350,000 would have been prevented by Elk Creek Lake. The peak stage of a flood such as that of 1964 would be reduced about 5.6 feet at Grants Pass by Lost Creek, and 7.4 feet by Lost Creek and Elk Creek Lakes combined. When there is a need for additional conservation storage in the region, engineering and environmental studies could be initiated to determine the feasibility of modifying operation of the project to include conservation storage. Annual benefits creditable to Elk Creek Lake are estimated to be $2,026,000 based on 1 October 1983 prices, considered as last added increment to the three-dam system and include the following:

Annual Benefits	Last Added Increment 3 1/4%
Flood Control	$ 1,883,000
Employment	143,000
Total	$ 2,026,000

FISCAL YEAR 1996: The total program amount, including the requested and programmed carryover amounts of $500,000 and $1,602,000, respectively, with an unobligated carryover of $802,000 [1] into FY 1997, will be applied as follows:

Continue main dam maintenance	$ 100,000
Continue water quality analysis	130,000
Continue fish operations	188,000
Continue Engineering and Design	882,000
Total	$1,300,000

[1] Carryover into FY 97 represents unused prior appropriation specifically appropriated for continued Engineering and Design, act language funds.

NON-FEDERAL COST: A non-Federal sponsor for this project has not been identified at this time. In the event a sponsor agrees to enter into a Project Cooperation Agreement for municipal and industrial water supply, the sponsor will pay all costs allocated to municipal and industrial water supply and bear all costs of operation, maintenance, and replacement of municipal and industrial water supply facilities; for recreation, the sponsor will pay one-half of the separable costs allocated to recreation and bear all costs of operation, maintenance, and replacement of recreation facilities; for agricultural water supply, the sponsor will pay all costs allocated to agricultural water supply and bear all costs of operation, maintenance, and replacement of agricultural water supply facilities.

STATUS OF LOCAL COOPERATION: Responsibility for repayment of irrigation costs rests with the Department of Interior pursuant to Federal Reclamation law. Responsible officials of four irrigation districts (Sams Valley, Eagle Point, Applegate Valley, and Rogue River Valley) have furnished preliminary assurances that it is the intention of each individual district to enter into a contract with the Secretary of the Interior to provide reimbursement of irrigation cost within each district's ability to repay such costs pursuant to reclamation law. Pursuant to Public Law 91-439, October 7, 1970, the project will not be operated for irrigation purposes until such time as the Secretary of the Interior makes the necessary arrangements with non-Federal interests to recover the costs, in accordance with the Federal Reclamation Law, which are allocated to the irrigation purpose. Assurances for future purchase of municipal and industrial water supply have been obtained from six communities in the valley: Medford, Grants Pass, Shady Cove, Sams Valley, Eagle Point, and Gold Hill. Phoenix, Oregon, a suburb of Medford, is currently purchasing municipal and industrial water supply storage at Lost Creek Lake.

Recreation facilities will not be scheduled until development of cost sharing agreements with local interests for construction and non-Federal operation and maintenance, consistent with projects for which recreation facilities are being constructed under provisions of the Federal Water Project Recreation Act of 1965 (PL 89-72), as amended.

COMPARISON OF FEDERAL COST ESTIMATES: The current Federal cost estimate of $174,000,000 is the same as the last estimate submitted to Congress (FY 1995).

STATUS OF ENVIRONMENTAL IMPACT STATEMENT: The Final Statement was filed with CEQ on September 17, 1971. Supplement No. 1, addressing water quality effects, was filed with EPA on December 24, 1980, and a Record of Decision was filed with EPA in February 1982. An environmental assessment addressing design changes (such as roller compacted concrete instead of embankment dam) was completed on October 11, 1983. Supplemental Information Reports dated September 23, 1985 and January 14, 1986 were provided to the public; these reports described the findings of the 1983 environmental assessment and other new information which had become available since the 1980 EIS Supplement. Another EIS supplement has been prepared as a result of litigation; this Supplement was completed and filed with the EPA on May 1, 1991. A Record of Decision, selecting the no conservation pool as the interim operating alternative, was signed on January 24, 1992.

OTHER INFORMATION: Funds to initiate preconstruction planning were appropriated in FY 1965, and for construction in FY 1971. Construction was deferred in FY 1977 due to a lack of state support. Following significant review, evaluation, and a public hearing, the Water Policy Review Board reversed its position and in April 1981 voted to support Elk Creek. Funds were appropriated in FY 1982 and FY 1983 to update and continue project design, plans, and specifications. Funds were appropriated in FY 1985 to resume construction. The Oregon Natural Resource Council (ONRC), a local environmental group, filed a suit against the U.S. Government in March of 1983 to halt construction of the Elk Creek Lake project based on alleged NEPA violations. U.S. District Court ruled on January 16, 1986, in favor of the U.S. Government. ONRC filed an appeal with the U.S. Ninth Circuit Court of Appeals who overturned the District Court ruling on June 23, 1987. The U.S. District Court in turn issued an injunction to limit the construction of the dam to elevation 1,563 feet on August 31, 1987. The U.S. Government filed for a rehearing of the U.S. Ninth Circuit Court of Appeals' ruling of June 23, 1987, and on December 10, 1987, the U.S. Ninth Circuit Court of Appeals denied the request. The U.S. Department of Justice filed a Writ of Certiorari (appeal) with the Supreme Court on April 14, 1988. On 1 May 1989, the U.S. Supreme Court unanimously reversed the Ninth Circuit Court and remanded the case. The injunction remained in effect pending completion of an Environmental Impact Statement Supplement No. 2 (EISS #2) as required by the U.S. Ninth Circuit Court of Appeals. Endangered Species Act coordination with the U.S. Fish and Wildlife Service was completed on December 27, 1991 and found no impact on the continued existence of the three species of wildlife in question.

In response to the final EISS #2, the Governor of Oregon stated that the dam should not be finished and urged that the existing structure be removed and the site restored. According to the Governor, an acceptable alternative would be to abandon the structure, with appropriate modifications for public safety and fish passage. The majority of the comments to the final EISS #2 stated that the Elk Creek Lake Project should be completed and operated with a full conservation pool. The need for stored water was used to justify this opinion in nearly all instances.

On November 5, 1992, the US Forest and the Bureau of Land Management issued a determination of the existing project's impact on the Wild and Scenic Section of the Rogue River beginning 57 miles downstream. The determination stated the project would not unreasonably diminish the wild and scenic river values when effective fish passage is provided under the no conservation pool alternative. A lawsuit alleging violations of the Wild and Scenic Rivers Act by the Corps, US Forest Service and the Bureau of Land Management was filed with the US District Court on December 7, 1992.

On July 22, 1992, the Department of Justice filed a motion with the Court to remove the injunction. A hearing was held on May 20, 1993. A second hearing on cross motions for summary judgement was held on December 17, 1993. The Court issued an opinion and order in February 1994, ruling that EISS #2 met the requirements of the previous court order and the first lawsuit was dismissed and injunction was removed. However, the Court also ruled that the Corps failed to justify its decision not to further supplement the EIS in light of new information concerning the status of fisheries in the Rogue River. The Court also ruled that the project could not be completed until the fish passage concerns of the U.S. Forest Service and Bureau of Land Management are eliminated. The Court remanded the case to the Corps to consider the new information and study fish passage and also imposed a new injunction against completion of the project. The ONRC and DOJ filed appeals with the 9th Circuit Court of Appeals, and on October 31, 1994 oral arguments were held on the issues of the legal sufficiency of EISS #2 and on the authority of USFS/BLM to issue a Section 7(a) Determination under the Wild and Scenic Rivers Act. No decision from the 9th Circuit Court has been made to date.

PROJECT: Chehalis River (South Aberdeen and Cosmopolis), Washington - (Continuing)

LOCATION: The project is located in the cities of Aberdeen and Cosmopolis (Grays Harbor County), at the mouth of the Chehalis River where it empties into the Grays Harbor tidal estuary near the Pacific Ocean coast of Washington State.

DESCRIPTION: The recommended plan of improvement will protect the major portion of the left bank flood plain at the mouth of the Chehalis River in the cities of Aberdeen and Cosmopolis. The project will consist of a 22,660-foot-long levee system. Tide gates will be provided where existing drainage channels cross the project alignment. Closure gates will be provided to maintain road and rail access through the levee system. The project will provide standard project flood protection, will operate independently, and is not part of a multi-project system.

AUTHORIZATION: Section 401(a) of the Water Resources Development Act of 1986.

REMAINING BENEFIT - REMAINING COST RATIO: 2.1 to 1 at 8%.

TOTAL BENEFIT - COST RATIO: 1.4 to 1 at 8-1/2%.

INITIAL TOTAL BENEFIT - COST RATIO: 1.4 to 1 at 8-1/2% (FY 1993).

BASIS OF BENEFIT-COST RATIO: Benefits are from the latest available evaluation contained in May 1992 Limited Re-evaluation Report at October 1991 price levels.

SUMMARIZED FINANCIAL DATA

Estimated Federal Cost		$10,700,000
Estimated Non-Federal Cost		3,600,000
Cash Contributions	2,243,000	
Other Costs	1,357,000	
Total Estimated Project Cost		$14,300,000

SUMMARIZED FINANCIAL DATA (con.)

STATUS 1 Jan 1995	PERCENT COMPLETE	COMPLETION SCHEDULE
Entire Project	20	Jun 1997

		Accum. Pct. of Est. Fed Cost.
Allocations to 30 September 1994	$ 3,504,000	
Conference Allowance for FY 1995	6,000,000	
Allocation for FY 1995	5,459,000 1/	
Allocations thru FY 1995	8,963,000 2/	84
Amount Requested for FY 1996	1,377,000	97
Programmed Balance to Complete after FY 1996	360,000	
Unprogrammed Balance to Complete after FY 1996	0	

1/ Reflects $950,000 reduction assigned as savings and slippage, and $409,000 reprogrammed to the project.
2/ Reflects $6,109,000 in programmed carryover into FY 96.

PHYSICAL DATA
PROPOSED LEVEE DESCRIPTION

Levee Type	Length
Earth Embankment	11,100 feet
Sheetpile Floodwall	5,230 feet
Raise in log storage yard	2,880 feet
Existing high ground (between segments)	3,310 feet
Total Levee Length	22,520 feet

JUSTIFICATION: The flood plain under study encompasses 1,394 acres on the left bank of the Chehalis River. Land use consists of urban-type development; which includes residential, commercial, industrial, and some pasture land. Total value of land and improvements on the floodplain is approximately $75 million. The maximum flood of record (10.2 feet NGVD at Port of Grays Harbor staff gage, or 150-year tidal event), occurred in December 1933. This event would cause an estimated $12.0 million damages in south Aberdeen and Cosmopolis under October 1991 prices and conditions of development. Existing average annual damages, estimated at $1,681,100, would be reduced to $20,700. The proposed project will provide protection from a Standard Project Flood to 1,176 urban acres including about 1,350 dwelling units and numerous commercial, industrial, and public buildings and facilities.

FISCAL YEAR 1996: The total program amount, including the requested and programmed carryover amounts of $1,377,000 and $6,109,000, respectively, will be applied as follows:

Support local sponsor's acquisition of lands, easements, and rights-of-way	$ 3,000
Complete Levee and Floodwall Construction	6,320,000
Planning, Engineering and Design	272,000
Construction Management	891,000
Total	$ 7,486,000

NON-FEDERAL COST: In accordance with the cost sharing and financing concepts reflected in the Water Resources Development Act of 1986, the non-Federal sponsor must comply with the requirements listed below (inflated costs).

Requirements of Local Cooperation:	Payments During Construction	Annual Operation, Maintenance and Replacement Costs
Provide lands, easements, and rights-of-way, and borrow and excavate material disposal areas.	$1,310,000	
Modify or relocate buildings, utilities, roads, bridges, and other facilities, where necessary in the construction of the project.	47,000	
Pay 15.7 percent of the costs allocated to flood control to bring the total non-Federal share of flood control costs to 25 percent, and bear all costs of operation, maintenance, and replacement of flood control facilities.	2,243,000	40,000
Total Non-Federal Costs	$3,600,000	$40,000

The non-Federal sponsor has also agreed to make all required payments concurrently with project construction.

STATUS OF LOCAL COOPERATION: The non-Federal sponsor is the City of Aberdeen (with the assistance of the city of Cosmopolis). The Acting ASA(CW) and the Mayor of Aberdeen signed the PCA on 1 March 1994. Aberdeen will provide its share of construction costs from the proceeds of a bond issue which was approved by the voters in November 1991. The bonds were sold in June 1993 and the proceeds are currently in the city treasury awaiting advertising of construction contract. Aberdeen is currently completing its required land acquisition activities and is performing necessary relocations. Cosmopolis will provide its share of construction costs from an increase in the Local Business and Occupation tax (approved by City Council, 18 October 1989, with effective date of 1 January 1990) Both cities will fund operation and maintenance of the project from their general funds as budgeted annually by Council Ordinances.

COMPARISON OF FEDERAL COST ESTIMATES: The current Federal (Corps of Engineers) cost estimate of $10,700,000 is unchanged from the latest estimate presented to Congress (FY 1995).

STATUS OF ENVIRONMENTAL IMPACT STATEMENT: The final EIS Supplement was filed with EPA in November 1990. The Section 10/404 Public Notice was issued on 1 June 1993 and a revised notice was issued on 12 October 1993. The project Record of Decision was signed by the acting Division Engineer on 5 November 1993. The State Hydraulic Project Approval was issued on 26 October 1993. The State Water Quality Certificate and the Coastal Zone Management Consistency Determination were issued on 3 December 1993. The Short Term Water Quality Modification Permit for the project was received on 20 May 1994.

OTHER INFORMATION: Funds to initiate preconstruction engineering and design were appropriated in FY 1984. Funds to initiate construction were appropriated in FY 1993.

The scheduled project completion date of June 1997 is a slippage from the latest project completion date of September 1996 presented to Congress. This is due to a delay in acquisition of real estate by the local sponsor. Construction is currently scheduled for September 1995, 2 to 3 months after land acquisition has been completed.

APPROPRIATION TITLE: Construction, General - Multiple Purpose Power

PROJECT: Columbia River Juvenile Fish Mitigation, Washington, Oregon, & Idaho (Continuing)

LOCATION: Lock and Dam projects on the Lower Columbia and Snake Rivers.

DESCRIPTION: The Mitigation consists of (1) continued construction of juvenile fish bypass and transportation facilities at Lower Granite, Little Goose, Lower Monumental, and Ice Harbor on the Snake River, and McNary and The Dalles on the Columbia River, (2) a mitigation analysis, prepared in cooperation with regional interests, to study additional measures to increase juvenile fish survival at Corps dams on the mainstem Columbia and Snake Rivers. The mitigation analysis will provide the analytical process for consideration and implementation of Federal actions necessary to support regional and National Marine Fisheries Service (NMFS) salmon recovery initiatives, and (3) advanced planning and design for modifications of public and private facilities affected by operating the John Day pool at minimum levels.

AUTHORIZATION: 1933 Federal Emergency Administration of Public Works; 1935, 1945 and 1950 River and Harbor Acts; 1937 Bonneville Project Act; and the 1950 Flood Control Act

REMAINING BENEFIT-REMAINING COST RATIO: Not applicable 1/

TOTAL BENEFIT-COST RATIO: Not applicable 1/

INITIAL BENEFIT-COST RATIO: Not applicable 1/

BASIS OF BENEFIT-COST RATIO: Not applicable 1/

1/ Mitigation is incrementally justified through consideration of costs and non-monetary and monetary benefits; accordingly, a benefit-cost ratio is not computed.

SUMMARIZED FINANCIAL DATA	
Estimated Total Appropriation Requirement (Corps of Engineers)	$583,600,000
Estimated Other Federal Costs (Bonneville Power Administration)	4,300,000
Total Initial Federal Cost	587,900,000
Unallocated Amount	31,439,000 2/
Future Non-Federal Reimbursement	472,208,000 3/
Estimated Federal Cost (Ultimate, C of E)	79,953,000 3/
Estimated Federal Cost (BPA)	4,300,000

STATUS (1 Jan 95)	PERCENT COMPLETE	COMPLETION SCHEDULE
Entire Project	26	Being Determined
Lower Granite	31	SEP 1996
Little Goose	52	DEC 1996
Lower Monumental	76	SEP 1997
Ice Harbor	60	SEP 1996
McNary	43	Being Determined
John Day: (Adv Pln & Dsgn, Drawdown)	15	Sep 1997 4/
(Juvenile Fish Monitoring)	3	Sep 1997
The Dalles	14	Being Determined
Bonneville: (Juv Fish Monitoring)	6	Being Determined
(Outfall Relocation)	1	Being Determined
Mitigation Analysis	16	Being Determined

SUMMARIZED FINANCIAL DATA (Continued)

Estimated Non Federal Cost		$ 472,208,000
Cash Contributions	0	
Other Costs	0	
Reimbursements	$ 472,208,000	
Power	$ 472,208,000	
Total Estimated Project Cost		$ 587,900,000

2/ Not allocated pending conclusion of Mitigation Analysis. (FY 92 drawdown claims $2,000,000; John Day AP&D $12,700,000; biological drawdown test costs $ 16,739,000).

3/ Excludes the unallocated amount.

4/ Advanced planning and design for modifications of the public and private facilities affected by operating the John Day pool at minimum levels is programmed, however potential future modifications at John Day currently is not in the project cost estimate.

		ACCUM. PCT OF EST FED COST
Allocations to 30 September 1994	$ 160,555,000	
Conference Allowance for FY 1995	36,300,000	
Allocation for FY 1995	31,812,000 6/	
Allocation through FY 1995	192,367,000	33
Allocation requested for FY 1996	78,800,000	46
Programmed Balance to Complete after FY 1996	312,433,000	
Unprogrammed Balance to Complete after FY 1996	0	

6/ Reflects $5,745,000 reduction assigned as savings and slippage, $1,257,000 reprogrammed to the project.

PHYSICAL DATA

Lower Granite Lock & Dam
  Extended Screens
  Fish Loading Improvements
  Barge Moorage Expansion
  Fish Transportation Barges

Little Goose Lock & Dam
  Extended Screens
  New Holding and Loading Facility

Lower Monumental Lock & Dam
  Screened Bypass
  Holding and Loading Facility

Ice Harbor Lock & Dam
  Screened Bypass

McNary Lock & Dam
  Extended Screens
  Holding & Loading Improvements

The Dalles Lock & Dam
  Extended Screen Bypass

Mitigation Analysis
  System Configure Studies
  Biological Drawdown Test
  John Day Extended Screen Study
  Surface Collection Studies
  Gas Abatement Studies
  Other Interim Studies and Activities

John Day Lock & Dam
  Advanced Planning and Design for
    Modifications of Public and Private
    Facilities Affected by Operating John
    Day Pool at Minimum Levels.
  Juvenile Fish Monitoring Facilities

Bonneville Lock and Dam
  Juvenile Fish Monitoring Facilities
  Outfall Relocation

JUSTIFICATION: Columbia River Juvenile Fish Mitigation provides mitigation for the impact of Corps dams on migrating juvenile salmon and steelhead. Completed and scheduled mitigation measures are based on analyses completed to date. Additional mitigation measures are being considered as a result of the Northwest Power Planning Council's regional rebuilding efforts for upriver salmon stocks and the NMFS listing of Snake River salmon as threatened/endangered. The Mitigation Analysis, began in FY 1991, will provide a regionally cooperative process for analyzing these proposed measures and will establish a scope for Federal actions in furtherance of regional and NMFS recover plans.

FISCAL YEAR 1996: The requested amount of $ 78,800,000 will be applied as follows:

	Amount		Amount
Lower Granite Complete Extended Screen Construction	$10,300,000	Little Goose Continue Extended Screen Construction	$ 9,800,000
Lower Monumental Initiate Gate Raise Modifications	$ 600,000	Ice Harbor Complete Fish Collection Facilities	$ 3,400,000
McNary Initiate Gate Raise Modifications Continue Extended Screen Construction	$16,200,000	The Dalles Continue Extended Screen Bypass Design	$ 2,500,000
Mitigation Analysis Continue System Configuration Studies, John Day Extended Screen Study, Surface Collection Studies, Gas Abatement Studies, and other Interim Studies and Activities	$23,900,000	John Day Continue Advanced Planning and Design for Public and Private Facilities Affected by Operation of John Day at Minimum Pool Levels Continue design of Juvenile Fish Monitoring Facilities	$ 7,800,000
Bonneville Continue Design of Outfall Facilities (Note: Continue design of Juvenile Fish Monitoring Facilities to be funded by BPA in FY 96)	$ 4,300,000		
		Total	$ 78,800,000

NON-FEDERAL COST: Costs eventually determined to be allocable to power are reimbursable. The dams being modified and analyzed are a part of the Federal Columbia River Power System. Bonneville Power Administration (BPA), the Federal marketing agency, establishes system rate levels adequate to recover all capital investment costs for generating projects (including Corps generating projects) within a 50-year period and to repay annual OM&R and interest expenses. BPA submits an annual financial statement to Congress, as required by law, on repayment and periodically recommends rate adjustments as required for meeting repayment obligations.

STATUS OF LOCAL COOPERATION: None required.

COMPARISON OF FEDERAL COST ESTIMATE: The current Federal (C of E) cost estimate of $583,600,000 is an increase of $ 83,600,000 from the latest estimate ($500,000,000) presented to Congress (FY 1995). This change includes the following items.

Item		Amount
Cost Estimate for Added Mitigation Improvements:		
John Day Juvenile Fish Monitoring Facilities		$ 7,100,000
Bonneville Juvenile Fish Monitoring Facilities		21,600,000
Bonneville Outfall Relocation		46,500,000
Revised Cost Estimate for Other Mitigation Improvements:		
John Day Advanced Planning and Design for Drawdown		7,700,000
Little Goose Vertical Barrier Screens		4,000,000
Lower Granite Vertical Barrier Screens and Spare Fish Slot		8,600,000
The Dalles Extended Screen Bypass		2,900,000
McNary Barrier Screens and Extended Screen Bypass		13,700,000
Revised Mitigation Analysis:		-28,500,000
Surface Collection & Bypass Studies	(83,396,000)	
Biological Drawdown Test Deleted	(-108,478,000)	
Net Reevaluation of Other Study Activities	(-3,418,000)	
		===========
	Total	$ 83,600,000

STATUS OF ENVIRONMENTAL IMPACT STATEMENT: Juvenile Fish Mitigation construction is generally covered by existing environmental impact statements. Additional Environmental documentation pursuant to NEPA will be accomplished as necessary. Consultations with the National Marine Fisheries Service will be held and biological assessments prepared as necessary to conform with requirements NEPA and of the Endangered Species Act (ESA).

OTHER INFORMATION: Funds to initiate construction were appropriated in Fiscal Year 1988.

The entire project's scheduled project completion date is being determined. The scheduled completion date for Little Goose slipped 3 months to December 1996 due to screen construction slippage.
The following scheduled completion dates have not changed since last year:
- September 1996 for Ice Harbor and Lower Granite
- September 1997 for Lower Monumental

The following scheduled completion dates are initial completion schedules:
- September 1997 for advanced planning and design for John Day modifications due to potential drawdown
- September 1997 for Juvenile Fish Monitoring Facilities at John Day

The following scheduled completion dates are being determined:
- The Dalles
- Mitigation Analysis
- Juvenile Fish Monitoring Facilities at Bonneville
- Bonneville Outfall Relocation
- McNary (extended screens are scheduled to be completed Dec 1996)

Salmon rebuilding initiatives for Corps implementation have been adopted by the Northwest Power Planning Council as a part of their amended Columbia River Basin Fish and Wildlife Program. NMFS is currently developing a recovery plan required under ESA for listed Snake River salmon stocks. Both actions will substantially affect Corps actions and potentially future budget requirements.

APPROPRIATION TITLE: Construction, General - Dam Safety Assurance

PROJECT: Howard Hanson Dam, Washington - (Continuing)

LOCATION: Howard Hanson Dam is located on the Green River, 23 miles upstream and east of Auburn, and 35 miles southeast of Seattle in western Washington.

DESCRIPTION: Project modifications will strengthen the existing reservoir outlet tower to withstand the Maximum Credible Earthquake (MCE) by adding braces to increase the tower section.

AUTHORIZATION: Flood Control Act of 1950 authorized the construction of the Eagle Gorge reservoir on the Green River. The project name was changed to Howard A. Hanson in 1958 by P.L. 85-592.

REMAINING BENEFIT - REMAINING COST RATIO: Not applicable to dam safety assurance projects.

INITIAL BENEFIT - COST RATIO: Not applicable to dam safety assurance projects.

SUMMARIZED FINANCIAL DATA

		Accum. Pct. of Est. Fed. Cost
Estimated Federal Cost	$1,947,000	
Estimated Non-Federal Cost	15,000	
Total Estimated Project Cost	$1,962,000	
Allocations to 30 September 1994	60,000	
Conference Allowance for FY 1995	0	
Allocation for FY 1995	300,000 1/	
Allocations thru FY 1995	360,000	18
Amount Requested for FY 1996	1,587,000	100
Programmed Balance to Complete after FY 1996	0	
Unprogrammed Balance to Complete after FY 1996	0	

STATUS (1 Jan 1995)	PERCENT COMPLETE	COMPLETION SCHEDULE
Entire Project	5	Jan 97

1/ Reprogrammed available funds from other projects to continue plans and specifications in FY 95 and reflects $56,000 in programmed carryover into FY 96.

Division: North Pacific District: Seattle Howard Hanson Dam, Washington (Dam Safety Assurance)

6 February 1995

PHYSICAL DATA:

Dam: Type: Rolled earth and rockfill
Height: 235 feet above bedrock
Crest: 500 feet long
Width: 960 feet at base, 23 feet at crest

Outlet Tower:
Type: Reinforced Concrete
Free standing section: 107 feet
Base section: 105 feet

Spillway: Type: Ogee crest with two 45'x30' tainter gates
Design Capacity: 107,000 cfs
Overtopping Capacity: 119,000 cfs

19 Ft. Tunnel:
Capacity: 22,000 cfs open channel flow
Normal Release: 10,000 cfs
Length: 900 feet

JUSTIFICATION: Howard A. Hanson Dam provides flood control storage on the Green River. Downstream of the dam is the Auburn-Kent Valley with the cities of Auburn, Kent, Renton, Algona, Pacific, and Tukwila. The dam provides protection for residential areas, agricultural lands, and intensively developed industrial and commercial areas. The Boeing Space Center, a major defense contractor, is located in the center of the Kent Valley. The number of people who work or live in the flood plain exceeds 200,000. The dam has prevented $422 million in flood damages since it began operations in 1962.

Dam Safety Assurance Program Evaluation Report, Howard A. Hanson Dam, January 1994 evaluated the ability of the existing dam to remain safe during and after the Maximum Credible Earthquake (MCE) and to remain operational during and after an Operating Basis Earthquake (OBE). A dynamic analysis earthquake study indicates that the present flood control outlet works tower (outlet tower) would fail during an earthquake event of less severity than the OBE. Failure of the outlet tower would result in direct costs of $5,050,000 (January 1994 price level) and in a minimum of $140,000,000 in economic damages. Failure of the outlet tower could lead to dam failure, with catastrophic downstream consequences including loss of life. There is nearly a 90 percent chance, during the 100-year life of the Howard A. Hanson project, that the present outlet tower will fail due to a seismic event.

Impacts to the environment due to tower failure would fall into several categories: direct and immediate, indirect, and cumulative. Occurring simultaneously with tower failure, or immediately thereafter, concrete debris and dust, hydraulic fluid, and other similar materials would enter the water. Water quality would be degraded and the reservoir would turn into an uncontrolled flow condition.

More significant, however, are impacts associated with the magnitude, timing, and duration of uncontrolled outflows from the Howard A. Hanson reservoir. Such flows would result in the types of environmental impacts associated with major flooding. Water quality, fish and wildlife habitat, and wetlands would be degraded for the long term. Damage could amount to the elimination of entire year classes of one or more anadromous fish species downstream or of some runs

JUSTIFICATION: (continued)
completely. Uncontrolled discharges of any but the most modest extent would seriously compromise the quality of the city of Tacoma's water supply. Failure of the outlet tower would be just one of many impacts of an earthquake on the area's infrastructure. As such, the impacts of the tower failure would have a compounding effect. For instance, concomitant damage of the city of Tacoma's water supply diversion structure could have long term dire implications for water supply and human health.

FISCAL YEAR 1996: The total program amount, including the requested amount and programmed carryover amounts of $1,587,000 and $56,000, respectively, with an unobligated carryover amount $20,000 into FY 1997, will be applied as follows:

Modify Dam Outlet Tower	$1,404,000
Engineering and Design	87,000
Construction Management	132,000
Total	$1,623,000

NON-FEDERAL COSTS: King County, Washington, is the local sponsor for the project.

STATUS OF LOCAL COOPERATION: Howard A. Hanson Dam is 100% federally owned and operated. Under the provisions of P.L. 99-662, Section 1203, 15 percent of the costs of project modifications will be shared in accordance with the cost sharing in effect at the time of initial project construction. There were contributions from non-Federal interests to reflect local benefits from land enhancement that totalled 5.1 percent of the initial cost of the Howard A. Hanson project.

COMPARISON OF FEDERAL COST ESTIMATES: The current Federal cost estimate of $1,947,000 is the initial cost estimate to be presented to Congress.

OTHER INFORMATION: The Design Memorandum (DM) No. 26, "Earthquake Analysis of Howard A. Hanson Dam" dated September 1983, provided justification for the seismic upgrade of the outlet tower and was funded under the O&M appropriation. The DM was approved in April 1984 subject to the availability of funds. Initially O&M funds were not available for construction. Subsequently, it was determined that a reconnaissance report was required. "Reconnaissance Report for Dam Safety Assurance Program, Howard A. Hanson Dam, Intake Tower" was prepared and submitted for approval in September 1987. The report was not approved and was revised several times, further delaying the project. The reconnaissance report was restructured as Dam Safety Assurance Program Evaluation Report, Howard A. Hanson Dam, in January 1994 to emphasize the consequences of not accomplishing the recommended project. The report was approved in May 1994.

The scheduled project completion date of January 1997 is the initial scheduled completion date presented to Congress.

APPROPRIATION TITLE: Construction, General - Multiple Purpose Power

PROJECT: Lower Snake River Fish and Wildlife Compensation, Washington, Oregon, Idaho, (Continuing)

LOCATION: Hatchery sites are located at McCall, Idaho, about 1,500 feet downstream from Payette Lake; Lyons Ferry, Washington, at River Mile 59 on the Snake River; Lookingglass, Oregon, about 10 miles northwest of Elgin, Oregon; Hagerman, Idaho, 10 miles west of Twin Falls, Idaho; Irrigon Hatchery, about 10 miles west of Umatilla, Oregon; Dworshak Expansion, Clearwater Hatchery, about 5 miles west of Orofino, Idaho; Sawtooth Hatchery about 5 miles south of Stanley, Idaho; Magic Valley Hatchery about 4 miles north of Buhl, Idaho; and Clearwater Hatchery about 5 miles west of Orofino, Idaho. Fishing and hunting access and wildlife habitat lands are located in Washington and Idaho.

DESCRIPTION: The project consists of a number of Chinook and Steelhead hatcheries that will provide 27,000,000 juvenile salmon and steelhead annually. These fish will be released in streams for migration to the Pacific Ocean. Adult salmon and steelhead resulting from these releases will provide both sport and commercial fishing opportunities with over 4 million pounds of fish going to the commercial fisheries and providing approximately 689,000 additional angler days of sport fishing. An estimated 132,000 adult fish will return to the project area of the Snake River. In addition to the anadromous fish, 93,000 pounds of trout will be reared and released in Eastern Washington which will provide 45,000 additional angler days of sport fishing. There will be an aggregate of 24,150 acres in fee or easement for fisherman access, wildlife habitat and hunting access. Additionally, a program has been implemented with Washington State Department of Game to produce the equivalent of 20,000 game birds per year for 20 years.

AUTHORIZATION: Water Resources Development Act of 1976 as modified by the Water Resources Development Act of 1986.

REMAINING BENEFIT-REMAINING COST RATIO: Not Applicable. 1/

TOTAL BENEFIT-COST RATIO: Not Applicable. 1/

INITIAL BENEFIT-COST RATIO: Not Applicable. 1/

BASIS OF BENEFIT COST RATIO: Not Applicable. 1/

1/ Mitigation is incrementally justified through consideration of costs and non-monetary benefits; accordingly, a benefit-cost ratio is not computed.

SUMMARIZED FINANCIAL DATA		
Estimated Total Appropriation Requirement		$ 232,000,000
Future Non-Federal Reimbursement		225,162,000
Estimated Federal Cost (Ultimate)		6,838,000
Estimated Non-Federal Cost		225,385,000
Cash Contributions	$ 223,000	
Reimbursements	225,162,000	
Power $ 225,162,000		
Total Estimated Project Cost		232,223,000 2/

STATUS: (1 Jan 95)	PERCENT COMPLETE	COMPLETION SCHEDULE
Entire Project	N/A 4/	Being Determined
Wildlife Compensation Facilities	16	Being Determined
Fish Facilities	N/A 4/	Being Determined
Lands	100	Sep 94

		ACCUM. PCT. OF EST. FED COST
Allocations to 30 Sep 1994	207,844,000	
Conference Allowance for FY 1995	6,000,000	
Allocation for FY 1995	5,200,000 3/	
Allocations through FY 1995	213,044,000	92
Allocation Requested for FY 1996	8,000,000	95
Programmed Balance to Complete after FY 1996	10,956,000	
Unprogrammed Balance to Complete after FY 1996	0	

2/ Includes $5,000,000 for additional hatchery facilities from FY 95 appropriations. However, the cost estimate is not yet available for this additional work.

3/ Reflects $950,000 reduction assigned as savings and slippage and $150,000 reprogrammed to the project.

4/ Percent complete is not available pending preparation of an cost estimate for the additional hatchery facilities included in the FY 1995 appropriations.

PHYSICAL DATA

Capacity of Hatcheries
9,160,000 Fall Chinook Smolts - 101,800 lbs.
6,750,000 Spring and Summer Chinook Smolts - 450,000 lbs.
11,020,000 Summer Steelhead - 1,377,500 lbs.
93,000 lbs. of Resident Sport Fishery

Acquisition of 24,150 acres for fisherman access and wildlife compensation and improvement of land for wildlife compensation.

Division: North Pacific

District: Walla Walla

Lower Snake River Fish and Wildlife Compensation, Washington, Oregon, Idaho

6 February 1995

JUSTIFICATION: The Lower Snake River Fish and Wildlife project will provide compensation for the losses to fish and wildlife resources that were caused by the construction and operation of the four Lower Snake River dam projects (Ice Harbor, Lower Monumental, Little Goose, and Lower Granite).

FISCAL YEAR 1996: The requested amount of $8,000,000 will be applied as follows:

Continue Clearwater Fish Hatchery Completion Work	$ 794,000
Continue Adult Trapping Facilities (upper Grande Ronde and Catherine Creek)	100,000
Continue Final Rearing/Acclimation Facilities (Clearwater, Snake and lower Grande Ronde)	100,000
Continue Water Treatment Facilities (Lookingglass Hatchery)	1,100,000
Continue Wildlife Compensation Facilities	5,906,000
Total	$ 8,000,000

NON-FEDERAL COSTS: Costs allocable to power presently estimated at $225,162,000 are reimbursable. This project is a part of the Federal Columbia River Power System. Bonneville Power Administration (BPA), the Federal marketing agency, establishes system rate levels adequate to recover all capital investment costs for generating projects (including Corps generating projects) within a 50-year period and to repay annual OM&R and interest expenses. BPA submits an annual financial statement to Congress, as required by law, on repayment and periodically recommends rate adjustments as required for meeting repayment obligations. In addition, a cash contribution to expand the Lyons Ferry Hatchery ($223,000) has been furnished.

STATUS OF LOCAL COOPERATION: None required for construction.

COMPARISON OF FEDERAL COST ESTIMATE: The current Federal cost estimate of $232,000,000 is an increase of $13,000,000 from the latest estimate ($219,000,000) presented to Congress (FY 1995). This change includes the following:

Item	Amount
Authorized Modifications (from the FY 1995 appropriations)	$ 5,000,000
Post Contract Award and Other Estimating Adjustments (including contingency adjustments)	8,000,000
TOTAL	$ 13,000,000

STATUS OF ENVIRONMENTAL IMPACT STATEMENT: The final Environmental Impact Statement was filed with the Council on Environmental Quality on 29 October 1977. Additional Environmental documentation pursuant to NEPA will be accomplished as necessary. Consultations with the National Marine Fisheries Service will be held and biological assessments prepared as necessary to conform with requirements of the Endangered Species Act.

OTHER INFORMATION:
Funds to initiate preconstruction planning were appropriated in Fiscal Year 1978 and for Construction in Fiscal Year 1979.

The purpose of the entire project is fish and wildlife compensation for the four mainstem dams on the Snake River.

The scheduled project completion date is being determined.

NORTH PACIFIC DIVISION
JUSTIFICATION OF ESTIMATE

APPROPRIATION TITLE: Operation and Maintenance, General, FY 1996

1. NAVIGATION.

a. Channels and Harbors.

The program request of $49,205,000 provides for essential maintenance work on 30 channel and harbor projects named in the list which follows. The work to be accomplished under this activity consists of maintaining the navigation channels and basins of coastal harbors by means of dredging, removal of navigation obstructions, and repair of navigation structures, as authorized in the laws adopting river and harbor projects.

State Project Name	OBLIGATIONS Estimated FY 1995 ($) Total (Operations) (Maintenance)	 Estimated FY 1996 ($) Total (Operations) (Maintenance)	EXPLANATION OF MAJOR CHANGES 1. Reasons for change in Operations from FY 1995 to FY 1996 (10%+/-). 2. Major Maintenance Items Budgeted in FY 1996 (Threshold $500,000).
ALASKA			
Anchorage Harbor	1,176,000	1,380,000	
	(0)	(0)	1. None.
	(1,176,000)	(1,380,000)	2. Dredging.
Dillingham Harbor	509,000	599,000	
	(0)	(0)	1. None.
	(509,000)	(599,000)	2. Dredging.
Homer Harbor	259,000	265,000	
	(0)	(0)	1. None.
	(259,000)	(265,000)	2. None.
Ketchikan, Thomas Basin	448,000	564,000	
	(0)	(0)	1. None.
	(448,000)	(564,000)	2. None.
Ninilchik Harbor	202,000	182,000	
	(0)	(0)	1. None.

NORTH PACIFIC DIVISION
JUSTIFICATION OF ESTIMATE

APPROPRIATION TITLE: Operation and Maintenance, General, FY 1996

1. NAVIGATION. (continued)

a. Channels and Harbors. (continued)

State Project Name	OBLIGATIONS Estimated FY 1995 ($) Total (Operations) (Maintenance)	 Estimated FY 1996 ($) Total (Operations) (Maintenance)	EXPLANATION OF MAJOR CHANGES 1. Reasons for change in Operations from FY 1995 to FY 1996 (10%+/-). 2. Major Maintenance Items Budgeted in FY 1996 (Threshold $500,000).
ALASKA (continued)			
	(202,000)	(182,000)	2. None.
Nome Harbor	313,000	305,000	
	(0)	(0)	1. None.
	(313,000)	(305,000)	2. None.

NORTH PACIFIC DIVISION
JUSTIFICATION OF ESTIMATE

APPROPRIATION TITLE: Operation and Maintenance, General, FY 1996

1. NAVIGATION. (continued)

a Channels and Harbors. (continued)

State Project Name	OBLIGATIONS Estimated FY 1995 ($)	 Estimated FY 1996 ($)	EXPLANATION OF MAJOR CHANGES
	Total	Total	
	(Operations)	(Operations)	1. Reasons for change in Operations from FY 1995 to FY 1996 (10%+/-).
	(Maintenance)	(Maintenance)	2. Major Maintenance Items Budgeted in FY 1996 (Threshold $500,000).
OREGON			
Chetco River	1,114,000	500,000	
	(12,000)	(12,000)	1. None.
	(1,102,000)	(488,000)	2. None.
Columbia and Lower Willamette Rivers below Vancouver, WA and Portland, OR	10,101,000	11,017,000	
	(1,795,000)	(1,813,000)	1. None.
	(8,306,000)	(9,204,000)	2. Dredging.
Columbia River at the Mouth	7,528,000	8,013,000	
	(255,000)	(54,000)	1. Hydrographic surveys FY 95.
	(7,273,000)	(7,959,000)	2. Dredging.
Columbia River between Vancouver, WA and The Dalles, OR	516,000	420,000	
	(192,000)	(201,000)	1. None.
	(324,000)	(219,000)	2. None.
Coos Bay	4,374,000	4,349,000	
	(101,000)	(95,000)	1. None.
	(4,273,000)	(4,254,000)	2. Dredging.
Coquille River	489,000	454,000	
	(15,000)	(14,000)	1. None.
	(474,000)	(440,000)	2. None.

NORTH PACIFIC DIVISION
JUSTIFICATION OF ESTIMATE

APPROPRIATION TITLE: Operation and Maintenance, General, FY 1996

1. NAVIGATION. (continued)

a. Channels and Harbors. (continued)

State Project Name	OBLIGATIONS Estimated FY 1995 ($) Total (Operations) (Maintenance)	 Estimated FY 1996 ($) Total (Operations) (Maintenance)	EXPLANATION OF MAJOR CHANGES 1. Reasons for change in Operations from FY 1995 to FY 1996 (10%+/-). 2. Major Maintenance Items Budgeted in FY 1996 (Threshold $500,000).
OREGON (Continued)			
Depoe Bay	27,000	3,000	
	(3,000)	(3,000)	1. None.
	(24,000)	(0)	2. None.
Port Orford	366,000	425,000	
	(18,000)	(17,000)	1. None.
	(348,000)	(408,000)	2. None.
Rogue River	777,000	816,000	
	(15,000)	(14,000)	1. None.
	(762,000)	(802,000)	2. Dredging.
Siuslaw River	864,000	864,000	
	(90,000)	(97,000)	1. None.
	(774,000)	(767,000)	2. Dredging.
Skipanon Channel	134,000	61,000	
	(17,000)	(61,000)	1. Sediment quality evaluations FY 96.
	(117,000)	(0)	2. None.
Tillamook Bay and Bar	8,000	43,000	
	(8,000)	(43,000)	1. Sediment quality evaluations FY 96.
	(0)	(0)	2. None.

NORTH PACIFIC DIVISION
JUSTIFICATION OF ESTIMATE

APPROPRIATION TITLE: Operation and Maintenance, General, FY 1996

1. NAVIGATION. (continued)

a. Channels and Harbors. (continued)

State Project Name	OBLIGATIONS Estimated FY 1995 ($)	 Estimated FY 1996 ($)	EXPLANATION OF MAJOR CHANGES
	Total	Total	
	(Operations)	(Operations)	1. Reasons for change in Operations from FY 1995 to FY 1996 (10%+/-).
	(Maintenance)	(Maintenance)	2. Major Maintenance Items Budgeted in FY 1996 (Threshold $500,000).
OREGON (Continued)			
Umpqua River	1,145,000	1,094,000	
	(63,000)	(67,000)	1. None.
	(1,082,000)	(1,027,000)	2. Dredging.
Yaquina Bay and Harbor	2,204,000	1,565,000	
	(50,000)	(53,000)	1. None.
	(2,154,000)	(1,512,000)	2. Dredging.
WASHINGTON			
Columbia River at Baker Bay	36,000	26,000	
	(26,000)	(26,000)	1. None.
	(10,000)	(0)	2. None.
Columbia River between Chinook and Sand Island	635,000	7,000	
	(7,000)	(7,000)	1. None.
	(628,000)	(0)	2. None.
Everett Harbor and Snohomish River	819,000	870,000	
	(42,000)	(55,000)	1. Increase sediment testing and evaluation FY 96.
	(777,000)	(815,000)	2. Dredging.

NORTH PACIFIC DIVISION
JUSTIFICATION OF ESTIMATE

APPROPRIATION TITLE: Operation and Maintenance, General, FY 1996

A. NAVIGATION (Continued)

1. Channels and Harbors (Continued)

State Project Name	OBLIGATIONS Estimated FY 1995 ($)	 Estimated FY 1996 ($)	EXPLANATION OF MAJOR CHANGES
	Total	Total	
	(Operations)	(Operations)	1. Reasons for change in Operations from FY 1995 to FY 1996 (10%+/-).
	(Maintenance)	(Maintenance)	2. Major Maintenance Items Budgeted in FY 1996 (Threshold $500,000).
WASHINGTON (Continued)			
Grays Harbor and Chehalis River	9,221,000	10,655,000	
	(70,000)	(30,000)	1. Inspect north jetty and Westport marina breakwater FY 95.
	(9,151,000)	(10,625,000)	2. Dredging.
Kenmore Navigation Channel	0	202,000	
	(0)	(0)	1. None.
	(0)	(202,000)	2. None.
Olympia Harbor	1,000	12,000	
	(1,000)	(12,000)	1. Breakwater inspection FY 96.
	(0)	(0)	2. None.
Puget Sound and Its Tributary Waters	1,086,000	1,155,000	
	(0)	(0)	1. None.
	(1,086,000)	(1,155,000)	2. Debris removal.
Quillayute River	730,000	2,250,000	
	(40,000)	(0)	1. Hydrographic surveys FY 95.
	(690,000)	(2,250,000)	2. Dredging.

NORTH PACIFIC DIVISION
JUSTIFICATION OF ESTIMATE

APPROPRIATION TITLE: Operation and Maintenance, General, FY 1996

1. NAVIGATION. (continued)

a. Channels and Harbors. (continued)

State Project Name	OBLIGATIONS Estimated FY 1995 ($)	 Estimated FY 1996 ($)	EXPLANATION OF MAJOR CHANGES
	Total	Total	
	(Operations)	(Operations)	1. Reasons for change in Operations from FY 1995 to FY 1996 (10%+/-).
	(Maintenance)	(Maintenance)	2. Major Maintenance Items Budgeted in FY 1996 (Threshold $500,000).
WASHINGTON (Continued)			
Seattle Harbor	256,000	678,000	
	(0)	(0)	1. None.
	(256,000)	(678,000)	2. Dredging.
Willapa River and Harbor	1,475,000	431,000	
	(195,000)	(0)	1. Hydrographic surveys FY 95.
	(1,280,000)	(431,000)	2. None.
Other Projects Maintained Periodically	469,000	0	
	(0)	(0)	1. None.
	(469,000)	(0)	2 None.
TOTAL - CHANNELS AND HARBORS	47,281,000	49,205,000	
	(3,015,000)	(2,674,000)	
	(44,266,000)	(46,531,000)	

NORTH PACIFIC DIVISION
JUSTIFICATION OF ESTIMATE

APPROPRIATION TITLE: Operation and Maintenance, General, FY 1996

1. NAVIGATION. (continued)

b. Locks and Dams. The program request of $7,723,000 provides the amount for operational requirements of two projects. Annual requirements are for operation and ordinary maintenance of project facilities; labor, supplies, materials and parts required for the day-to-day functioning of projects; and periodic maintenance, repairs, replacement and modernization.

State Project Name	OBLIGATIONS Estimated FY 1995 ($) Total (Operations) (Maintenance)	 Estimated FY 1996 ($) Total (Operations) (Maintenance)	EXPLANATION OF MAJOR CHANGES 1. Reasons for change in Operations from FY 1995 to FY 1996 (10%+/-). 2. Major Maintenance Items Budgeted in FY 1996 (Threshold $500,000).
OREGON			
Willamette River at Willamette Falls	764,000 (490,000) (274,000)	846,000 (493,000) (353,000)	1. None. 2. None.
WASHINGTON			
Lake Washington Ship Canal	5,593,000 (3,397,000) (2,196,000)	6,877,000 (3,176,000) (3,701,000)	1. None. 2. Provide maintenance of lock and control structure. Provide maintenance of buildings, grounds and utilities.
TOTAL - LOCKS AND DAMS	6,357,000 (3,887,000) (2,470,000)	7,723,000 (3,669,000) (4,054,000)	
TOTAL - NAVIGATION	53,638,000 (6,902,000) (46,736,000)	56,928,000 (6,343,000) (50,585,000)	

NORTH PACIFIC DIVISION
JUSTIFICATION OF ESTIMATE

APPROPRIATION TITLE: Operation and Maintenance, General, FY 1996

2. FLOOD CONTROL.

a. Reservoirs. The program request of $11,875,000 for the operation and maintenance of 12 flood control reservoirs, including essential repair work and scheduling of flood control reservoir operations within the Division provides the amount for operational requirements. Annual requirements are for operation and ordinary maintenance of project facilities; labor, supplies, material and parts required for day-by-day functioning of projects; periodic maintenance, repairs, and replacements; and contract law enforcement. The requested amount also includes application of special recreation use fees for recreation areas.

State	OBLIGATIONS		
Project Name	Estimated FY 1995 ($)	Estimated FY 1996 ($)	EXPLANATION OF MAJOR CHANGES
	Total	Total	
	(Operations)	(Operations)	1. Reasons for change in Operations from FY 1995 to FY 1996 (10%+/-).
	(Maintenance)	(Maintenance)	2. Major Maintenance Items Budgeted in FY 1996 (Threshold $500,000).
ALASKA			
Chena River Lakes	2,009,000	1,649,000	
	(1,400,000)	(1,081,000)	1. Groundwater investigation study FY 95.
	(609,000)	(568,000)	2. None.
IDAHO			
Lucky Peak Lake	925,000	1,054,000	
	(591,000)	(739,000)	1. Periodic inspection of dam facilities and environmental compliance management work FY 96.
	(334,000)	(315,000)	2. None.
OREGON			
Applegate Lake	630,000	664,000	
	(564,000)	(581,000)	1. None.
	(66,000)	(83,000)	2. None.
Blue River Lake	372,000	442,000	
	(328,000)	(410,000)	1. Increased seismic reevaluation study activities FY 96.
	(44,000)	(32,000)	2. None.

NORTH PACIFIC DIVISION
JUSTIFICATION OF ESTIMATE

APPROPRIATION TITLE: Operation and Maintenance, General, FY 1996

2. FLOOD CONTROL. (Continued)

a. Reservoirs. (Continued)

State Project Name	OBLIGATIONS Estimated FY 1995 ($) Total (Operations) (Maintenance)	 Estimated FY 1996 ($) Total (Operations) (Maintenance)	EXPLANATION OF MAJOR CHANGES 1. Reasons for change in Operations from FY 1995 to FY 1996 (10%+/-). 2. Major Maintenance Items Budgeted in FY 1996 (Threshold $500,000).
OREGON (Continued)			
Cottage Grove Lake	692,000 (535,000) (157,000)	719,000 (532,000) (187,000)	1. None. 2. None.
Dorena Lake	548,000 (374,000) (174,000)	552,000 (383,000) (169,000)	1. None. 2. None.
Fall Creek Lake	580,000 (442,000) (138,000)	559,000 (427,000) (132,000)	1. None. 2. None.
Fern Ridge Lake	834,000 (625,000) (209,000)	920,000 (565,000) (355,000)	1. None. 2. None.
Willow Creek Lake	531,000 (423,000) (108,000)	482,000 (407,000) (75,000)	1. None. 2. None.

NORTH PACIFIC DIVISION
JUSTIFICATION OF ESTIMATE

APPROPRIATION TITLE: Operation and Maintenance, General, FY 1996

2. FLOOD CONTROL. (Continued)

a. Reservoirs. (Continued)

State Project Name	OBLIGATIONS Estimated FY 1995 ($) Total (Operations) (Maintenance)	 Estimated FY 1996 ($) Total (Operations) (Maintenance)	EXPLANATION OF MAJOR CHANGES 1. Reasons for change in Operations from FY 1995 to FY 1996 (10%+/-). 2. Major Maintenance Items Budgeted in FY 1996 (Threshold $500,000).
WASHINGTON			
Howard A. Hanson Reservoir	1,006,000	1,373,000	
	(767,000)	(998,000)	1. Increased activities to support development of water control plan and master plan / operational management plan.
	(239,000)	(375,000)	2. None.
Mill Creek, Virgil B. Bennington Lake	747,000	731,000	
	(514,000)	(478,000)	1. None.
	(233,000)	(253,000)	2. None.
Mud Mountain Dam	1,653,000	1,922,000	
	(1,043,000)	(1,203,000)	1. Increased activities to support development of water control plan and master plan / operational management plan.
	(610,000)	(719,000)	2. None.
Scheduling Reservoir Operations	795,000	808,000	
	(795,000)	(808,000)	1. None.
	(0)	(0)	2. None.
TOTAL - RESERVOIRS	11,322,000	11,875,000	
	(8,401,000)	(8,612,000)	
	(2,921,000)	(3,263,000)	

NORTH PACIFIC DIVISION
JUSTIFICATION OF ESTIMATE

APPROPRIATION TITLE: Operation and Maintenance, General, FY 1996

2. FLOOD CONTROL. (Continued)

b. Channel Improvements, Inspection and Miscellaneous Maintenance. The program request of $2,151,000 provides for the essential annual and periodic maintenance requirements of five flood control protection projects and inspection of completed works within the Division during the budget year.

State Project Name	OBLIGATIONS Estimated FY 1995 ($)	 Estimated FY 1996 ($)	EXPLANATION OF MAJOR CHANGES
	Total (Operations) (Maintenance)	Total (Operations) (Maintenance)	1. Reasons for change in Operations from FY 1995 to FY 1996 (10%+/-). 2. Major Maintenance Items Budgeted in FY 1996 (Threshold $500,000).
OREGON			
Willamette River Basin Bank Protection	59,000	70,000	
	(59,000)	(70,000)	1. None.
	(0)	(0)	2. None.
WASHINGTON			
Mt. St. Helens	472,000	432,000	
	(398,000)	(386,000)	1. None.
	(74,000)	(46,000)	2. None.
Stillaguamish River	172,000	174,000	
	(0)	(0)	1. None.
	(172,000)	(174,000)	2. None.
Tacoma, Puyallup River	55,000	56,000	
	(10,000)	(13,000)	1. None.
	(45,000)	(43,000)	2. None.

NORTH PACIFIC DIVISION
JUSTIFICATION OF ESTIMATE

APPROPRIATION TITLE: Operation and Maintenance, General, FY 1996

2. FLOOD CONTROL. (Continued)

b. Channel Improvements, Inspection and Miscellaneous Maintenance. (Continued)

State Project Name	OBLIGATIONS Estimated FY 1995 ($) Total (Operations) (Maintenance)	 Estimated FY 1996 ($) Total (Operations) (Maintenance)	EXPLANATION OF MAJOR CHANGES 1. Reasons for change in Operations from FY ·1995 to FY 1996 (10%+/-). 2. Major Maintenance Items Budgeted in FY 1996 (Threshold $500,000).
WYOMING			
Jackson Hole Levees	1,294,000 (120,000) (1,174,000)	979,000 (116,000) (863,000)	1. None. 2. None.
Inspection of Completed Works	436,000 (436,000) (0)	440,000 (440,000) (0)	1. None. 2. None.
TOTAL - CHANNEL IMPROVEMENTS, INSPECTIONS AND MISCELLANEOUS	2,488,000 (1,023,000) (1,465,000)	2,151,000 (1,025,000) (1,126,000)	
TOTAL - FLOOD CONTROL	13,810,000 (9,424,000) (4,386,000)	14,026,000 (9,637,000) (4,389,000)	

NORTH PACIFIC DIVISION
JUSTIFICATION OF ESTIMATE

APPROPRIATION TITLE: Operation and Maintenance, General, FY 1996

3. MULTIPLE PURPOSE POWER PROJECTS. The program request of $141,814,000 for the operation and maintenance of 19 multiple purpose projects provides the amount for operational requirements. Annual requirements are for operation and ordinary maintenance of project facilities; labor, supplies, materials and parts required for the day-by-day functioning of the projects; and periodic maintenance, repairs and replacements. The requested amount also includes application of special recreation use fees for recreation areas.

State Project Name	OBLIGATIONS Estimated FY 1995 ($) Total (Operations) (Maintenance)	 Estimated FY 1996 ($) Total (Operations) (Maintenance)	EXPLANATION OF MAJOR CHANGES 1. Reasons for change in Operations from FY 1995 to FY 1996 (10%+/-). 2. Major Maintenance Items Budgeted in FY 1996 (Threshold $500,000).
IDAHO			
Albeni Falls Dam	5,053,000	4,467,000	
	(3,159,000)	(2,891,000)	1. None.
	(1,894,000)	(1,576 000)	2. Provide routine powerplant maintenance.
Dworshak Dam and Reservoir	7,790,000	9,144,000	
	(4,183,000)	(4,959,000)	1. Environmental compliance management work FY 96. Increased effort in FY 96 for janitorial services, communications, utilities, fire protection contract and monitoring of habitat for future development.
	(3,607,000)	(4,185,000)	2. Provide routine maintenance for powerhouse, dam, and the fish hatchery. Dam foundation grouting.
MONTANA			
Libby Dam, Lake Koocanusa	5,538,000	5,009,000	
	(3,405,000)	(3,172 000)	1. None.
	(2,133,000)	(1,837,000)	2. Provide routine powerplant maintenance.

NORTH PACIFIC DIVISION
JUSTIFICATION OF ESTIMATE

APPROPRIATION TITLE: Operation and Maintenance, General, FY 1996

3. MULTIPLE PURPOSE POWER PROJECTS. (Continued)

State Project Name	OBLIGATIONS Estimated FY 1995 ($)	 Estimated FY 1996 ($)	EXPLANATION OF MAJOR CHANGES
	Total	Total	
	(Operations)	(Operations)	1. Reasons for change in Operations from FY 1995 to FY 1996 (10%+/-).
	(Maintenance)	(Maintenance)	2. Major Maintenance Items Budgeted in FY 1996 (Threshold $500,000).
OREGON			
Bonneville Lock and Dam	16,585,000	18,788,000	
	(6,878,000)	(6,662,000)	1. None.
	(9,707,000)	(12,126,000)	2. Provide routine maintenance for powerhouse, fish passage facilities, and building/grounds/roads. Provide maintenance due to endangered species act including modifying the upstream entrance gates and automating the spillway gates. Replace exciters at 1st powerhouse.
Cougar Lake	1,072,000	1,282,000	
	(826,000)	(835,000)	1. None.
	(246,000)	(447,000)	2. None.
Detroit Lake	1,999,000	2,247,000	
	(1,465,000)	(1,594,000)	1. None.
	(534,000)	(653,000)	2. None.
Green Peter Foster Lakes	2,244,000	2,558,000	
	(1,762,000)	(1,800,000)	1. None.
	(482,000)	(758,000)	2. None.
Hills Creek Lake	753,000	752,000	
	(525,000)	(537,000)	1. None.
	(228,000)	(215,000)	2. None.

NORTH PACIFIC DIVISION
JUSTIFICATION OF ESTIMATE

APPROPRIATION TITLE: Operation and Maintenance, General, FY 1996

3. MULTIPLE PURPOSE POWER PROJECTS. (Continued)

State	OBLIGATIONS		
Project Name	Estimated FY 1995 ($)	Estimated FY 1996 ($)	EXPLANATION OF MAJOR CHANGES
	Total	Total	
	(Operations)	(Operations)	1. Reasons for change in Operations from FY 1995 to FY 1996 (10%+/-).
	(Maintenance)	(Maintenance)	2. Major Maintenance Items Budgeted in FY 1996 (Threshold $500,000).
OREGON (continued)			
John Day Lock and Dam	16,791,000	14,988,000	
	(6,744,000)	(6,833,000)	1. None.
	(10,047,000)	(8,155,000)	2. Maintain powerhouse and maintain fish passage facilities. See justification sheets for continuing major rehabilitation of the powerhouse.
Lookout Point Lake	3,477,000	5,439,000	
	(2,734,000)	(2,871,000)	1. None.
	(743,000)	(2,568,000)	2. Provide routine powerhouse maintenance. Purchase spare stator winding.
Lost Creek Lake	3,675,000	3,914,000	
	(3,123,000)	(3,135,000)	1. None.
	(552,000)	(779,000)	2. None.
McNary Lock and Dam	10,303,000	12,561,000	
	(5,188,000)	(5,669,000)	1. None.
	(5,115,000)	(6,892,000)	2. Provide routine powerplant maintenance. Provide increased maintenance due to the endangered species act including prevention of contamination of the fish facilities from potential transformer fluid discharges. Rehab fishway entrance gates and floating orifices.

NORTH PACIFIC DIVISION
JUSTIFICATION OF ESTIMATE

APPROPRIATION TITLE: Operation and Maintenance, General, FY 1996

3. MULTIPLE PURPOSE POWER PROJECTS. (Continued)

State Project Name	OBLIGATIONS Estimated FY 1995 ($) Total (Operations) (Maintenance)	 Estimated FY 1996 ($) Total (Operations) (Maintenance)	EXPLANATION OF MAJOR CHANGES 1. Reasons for change in Operations from FY 1995 to FY 1996 (10%+/-). 2. Major Maintenance Items Budgeted in FY 1996 (Threshold $500,000).
WASHINGTON			
Chief Joseph Dam	10,673,000	12,038,000	
	(5,756,000)	(6,441,000)	1. Increased activities for Master Plan, fish planning, real estate support and other support activities.
	(4,917,000)	(5,597,000)	2. Provide routine powerplant maintenance; maintain buildings, grounds and utilities; and maintain and purchase permanent operating equipment.
Ice Harbor Lock and Dam	7,550,000	14,884,000	
	(3,762,000)	(4,282,000)	1. Added operation costs for new fish bypass facilities and increase for environmental compliance management work FY 96.
	(3,788,000)	(10,602,000)	2. Provide routine powerplant maintenance and replace downstream lock gate.
Little Goose Lock and Dam	6,727,000	4,978,000	
	(3,062,000)	(2,872,000)	1. None.
	(3,665,000)	(2,106,000)	2. Provide routine powerplant maintenance.
Lower Granite Lock and Dam	6,605,000	10,618,000	
	(3,763,000)	(3,820,000)	1. None.
	(2,842,000)	(6,798,000)	2. Provide routine powerplant maintenance. Rewedge generator units 4, 5, and 6. Rehab adult fish trapping facilities and repair Lewiston water intakes.

NORTH PACIFIC DIVISION
JUSTIFICATION OF ESTIMATE

APPROPRIATION TITLE: Operation and Maintenance, General, FY 1996

3. MULTIPLE PURPOSE POWER PROJECTS. (Continued)

State Project Name	OBLIGATIONS Estimated FY 1995 ($)	 Estimated FY 1996 ($)	EXPLANATION OF MAJOR CHANGES
	Total	Total	
	(Operations)	(Operations)	1. Reasons for change in Operations from FY 1995 to FY 1996 (10%+/-).
	(Maintenance)	(Maintenance)	2. Major Maintenance Items Budgeted in FY 1996 (Threshold $500,000).
WASHINGTON (continued)			
Lower Monumental Lock and Dam	7,453,000	5,318,000	
	(3,313,000)	(2,915,000)	1. Decreased fish passage development and evaluation costs FY 96.
	(4,140,000)	(2,403,000)	2. Provide routine powerplant maintenance.
The Dalles Lock and Dam	9,942,000	12,270,000	
	(4,959,000)	(4,748,000)	1. None.
	(4,983,000)	(7,522,000)	2. Provide routine powerplant maintenance and provide increased maintenance due to the endangered species act including improving the adult fish attraction water supply. Provide engineering and design for main unit rehabilitation.
Columbia River System Operation Review	1,044,000	559,000	
	(1,044,000)	(559,000)	1. None.
	(0)	(0)	2. None.
Other Projects	100,000	0	
	(0)	(0)	1. None.
	(100,000)	(0)	2. None.
TOTAL - MULTIPLE PURPOSE PROJECTS	125,374,000	141,814,000	
	(65,651,000)	(66,595,000)	
	(59,723,000)	(75,219,000)	

NORTH PACIFIC DIVISION
JUSTIFICATION OF ESTIMATE

APPROPRIATION TITLE: Operation and Maintenance, General, FY 1996

4. PROTECTION OF NAVIGATION. The program request of $1,134,000 provides for project condition surveys on some projects for which maintenance is not scheduled in the budget year, and surveillance of northern boundary waters.

State Project Name	OBLIGATIONS Estimated FY 1995 ($)	 Estimated FY 1996 ($)	EXPLANATION OF MAJOR CHANGES
	Total	Total	
	(Operations)	(Operations)	1. Reasons for change in Operations from FY 1995 to FY 1996 (10%+/-).
	(Maintenance)	(Maintenance)	2. Major Maintenance Items Budgeted in FY 1996 (Threshold $500,000).
Project Condition Surveys	855,000	932,000	
	(855,000)	(932,000)	1. None.
	(0)	(0)	2. None.
Surveillance of Northern Boundary Waters	214,000	202,000	
	(214,000)	(202,000)	1. None.
	(0)	(0)	2. None.
TOTAL - PROTECTION OF NAVIGATION	1,069,000	1,134,000	
	(1,069,000)	(1,134,000)	
	(0)	(0)	
GRAND TOTAL	193,891,000	213,902,000	
	(83,046,000)	(83,709,000)	
	(110,845,000)	(130,193,000)	

APPROPRIATION TITLE: Operation & Maintenance, General - Multiple-Purpose Power Projects

PROJECT: John Day Powerhouse, Oregon and Washington (Major Rehabilitation)(Continuing)

LOCATION: On the Columbia River at the head of The Dalles Dam pool, River Mile 215.6, about 100 miles east of Portland, Oregon.

DESCRIPTION: Major rehabilitation of 16 generating units (turbines and generators) and appurtenant support equipment (controls, station service and circuit breakers).

AUTHORIZATION: 1950 and 1965 Flood Control Acts (Existing Project).

REMAINING BENEFIT - REMAINING COST RATIO: 1.08 to 1 at 8-1/8 percent.

TOTAL BENEFIT - COST RATIO: 0.96 to 1 at 8-1/8 percent.

INITIAL BENEFIT - COST RATIO: 1.2 to 1 at 8-1/8 percent for turbine and generator repair.

BASIS OF BENEFIT - COST RATIO: Turbine and generator repair benefits are from Reconnaissance Report approved in August 1987 at October 1983 price levels.

SUMMARIZED FINANCIAL DATA		
Estimated Appropriation Requirement		$41,800,000
Future Non-Federal Reimbursement		$41,800,000
Estimated Federal Cost (Ultimate)		0
Estimated Non-Federal Cost		$41,800,000
Reimbursements	$41,800,000	
Power $41,800,000		
Total Estimated Project Cost		$41,800,000

STATUS (1 Jan 1995)	PERCENT COMPLETE	COMPLETION SCHEDULE
Entire Project	80	Sep 1996

Division: North Pacific District: Portland John Day Powerhouse, OR & WA (Major Rehabilitation)

		Accum.% of Est Federal Cost
Allocations to 30 September 1994	$33,235,000	
Conference Allowance for FY 1995	5,800,000	
Allocation for FY 1995	4,500,000	
Allocations through FY 1995	37,735,000	90
Allocation Requested for FY 1996	4,065,000	100
Scheduled Balance to Complete after FY 1996	0	
Unscheduled Balance to Complete after FY 1996	0	

PHYSICAL DATA (EXISTING PROJECT)

Powerhouse: Number of completed bays initial installation - 16; Number of skeleton bays initial installation - 4; Generator nameplate rating - 135,000 kw; Initial plant capacity - 2,160,000 kw.

JUSTIFICATION: The importance of John Day Dam to the northwest regional power pool is far greater than may be inferred from its 7 percent share of total NW system output or its 18% share of Corps of Engineers regional production. Because of its large capacity, relative freedom from operating constraints, and strategic location with respect to load centers, transmission lines, and to other major hydroelectric projects, John Day Dam is probably the most important project as far as control of the regional power system is concerned. The North Pacific Division has been continuously monitoring the generator availability rates for all of the Corps of Engineers hydroelectric projects in the Pacific Northwest since 1955. Because all of these projects utilize basically the same maintenance program and all report unit availability based upon identical criteria, the availability datum is extremely useful for projected abnormal situations. The yearly average availability from 1975 to 1986 was 91.5 percent. In 1984, John Day unit availability fell to an all-time low of approximately 78.1 percent, substantially affecting John Day's ability to provide automatic generation control and spinning reserve for the Northwest Power Pool. To raise John Day's availability rate and maintain optimum availability of 95 percent requires major rehabilitation of the generating units and appurtenant support equipment. It is essential that the rehabilitation program be systematically carried to completion. Failure to perform major rehabilitation will promote deterioration of powerhouse availability. Operation of the power plant for peaking as well as for balancing regional power load variations requires rapid control of generating units to compensate for changing load and voltage conditions. Frequent unit loading and unloading have taxed the turbines and generators in excess of their original design capability. As an example, the number of circuit breakers' "close-open" operations has increased from 14 per day in 1972 to 27 per day in 1981; this not only creates additional cycling on the circuit breakers themselves, but it is also indicative of additional thermal cycling and wear and tear on the turbines, generators, and related features of the generating system. Because the original design did not fully anticipate these additional demands on the generating units, defects are now appearing in them and outage problems have increased, lowering unit availability. A case in point has been turbine blade servomotor piston cap failures. Unit outages resulting from this defect have accounted for much of the reduced unit availability. Anticipated generator stator winding failures in the future would decrease generating availability to below 70 percent.

FISCAL YEAR 1996: The requested amount of $4,065,000 will be applied as follows:

Continue Powerhouse Rehabilitation	$3,808,000
Engineering and Design	215,000
Supervision and Administration	42,000
Total	$4,065,000

STATUS OF LOCAL COOPERATION: None required for major rehabilitation.

NON-FEDERAL COSTS: Costs allocated to power, presently estimated at $41,800,000, are reimbursable. This project is a part of the Federal Columbia River power system. Bonneville Power Administration (BPA), the federal marketing agency, establishes system rate levels adequate to recover all capital investment cost for generating projects (including Corps generating projects) within 50-year period and to repay annual OM&R and interest expenses. BPA submits annual financial statements to Congress, as required by law, on repayment and periodically recommends rate adjustment as required for meeting repayment obligations.

COMPARISON OF FEDERAL COST ESTIMATE: The current federal cost estimate of $41,800,000 reflects no change from the previous estimate ($41,800,000) presented to Congress (FY 1995).

STATUS OF ENVIRONMENTAL IMPACT STATEMENT: The final Environmental Impact Statement was filed with the Council on Environmental Quality on 29 July 1975.

OTHER INFORMATION:

Initial construction of the powerhouse was completed in 1971.

A reconnaissance report, turbine-generator equipment studies, and initial engineering and design and construction efforts were initially financed by Operation and Maintenance, General in FY 1982. The Project Management Plan was approved in June 1991. Funds to initiate major powerhouse rehabilitation under Operation and Maintenance, General were provided in FY 1985. Each unit outage will be approximately 34 weeks.

RECOGNITION

Mr. MYERS. You are an old pro here. You have been before this committee a great many times.

General HARRELL. My last one, sir.

Mr. MYERS. This is your last one, too? Is anybody going to be left on the job after this year?

General HARRELL. Oh, we come and go. There is always a new group that comes in behind us.

Mr. MYERS. Yes, I see people back there polishing their brass.

General HARRELL. That is right.

Mr. MYERS. I remember when I was a major, I polished mine. I thought maybe it would turn kind of light.

WALLA WALLA RIVER WATERSHED STUDY, WASHINGTON AND OREGON

I have several questions. One, the Washington Department of Ecology is doing a watershed planning effort. Why is it necessary for the Corps to get into it when the State is already doing that?

General HARRELL. I was not aware of the study but——

Mr. MYERS. The Walla Walla River Basin is what I am speaking about. Do you have the study?

General HARRELL. Let me give Mr. Velehradsky a chance to answer that question. These guys come all the way to Washington. They don't say anything. Here is his chance.

Mr. VELEHRADSKY. The Walla Walla river basin study is a reconnaissance investigation that was requested by local interests, and we are developing that reconnaissance. We will be working with the local interests to determine whether they want to go into the feasibility phase.

Mr. MYERS. Would that be considered work for others? Are they going to pay for it or are you going pay for it out of Federal funds?

Mr. VELEHRADSKY. They would have to cost-share on the feasibility phase of that study if we proceed that far.

Mr. MYERS. Under the new criteria, you are not going to do it anyway, are you, as a Corps project, if that becomes a reality?

Mr. VELEHRADSKY. If it is determined that it does not meet the right criteria, we will not proceed.

Mr. MYERS. Well, would it—Walla Walla River, would more than 50 percent of the flow come outside the State of Washington?

Mr. VELEHRADSKY. I would have to provide that—we would have to provide that for the record.

Mr. MYERS. If I know the river, it would not. That wouldn't be possible.

[The information follows:]

WALLA WALLA RIVER, WASHINGTON

The Walla Walla River is located in southeastern Washington and Northeastern Oregon. Most of the flow originates in Washington State, thereby removing flood control as a primary purpose under the proposed new policies. However, the study will evaluate needs other than flood control to include fish and wildlife, riparian and wetland restoration, water quality, water supply, erosion control, low flow augmentation, and recreation.

STILLAGUAMISH RIVER, WASHINGTON

Mr. MYERS. It seems to me we have to do something about reducing spending and some of these things. I think the committee has got to take a look at it this year. And the habitat restoration efforts on the Stillaguamish River basin in Washington State——

General HARRELL. Stillaguamish.

Mr. MYERS. Whatever.

General HARRELL. Let me spell it for you. It is S–T–I–L–L–A–G–U–A–M–I–S–H.

Mr. MYERS. Why—again, why is the Corps doing this when it is within the State of Washington?

General HARRELL. Well, under current policy, when a determination is to be made whether or not there is a possibility for a project that the Federal Government may want to enter into, and of course that project may very well be caught up under the new policy and we would have to, as discussed several times yesterday, entertain discussions with the local sponsors to include the State as to whether or not we move into the feasibility phase—whether they would want to continue with that phase with no possibility of the Corps funding beyond the percentages of 25, 75 with the Federal Government picking up 25 percent. So that would be an option that they would have, to either eliminate their support during the feasibility phase and go it alone, or to continue with the Corps, again, with the possibility of moving into construction with a 25 Federal, 75 local cost-sharing agreement.

Mr. MYERS. That is going to be a tough one for a lot of the local sponsors to meet, also.

General HARRELL. Absolutely.

PROPOSED NEW POLICY

Mr. MYERS. We have had trouble coming up with the 75–25, with the local government coming up with 25. A lot of trouble, this committee has experienced, and I am sure you, too. How much trouble have you had in examining these because of the proposed new criteria?

General HARRELL. Again, just like the answer that Colonel King gave, we are in the process of reviewing all of these.

He mentioned his partnering conference in April. I think we are having ours in May and that is an opportunity collectively to get together. Our districts, based upon the information that we have been provided thus far, are presently working with local sponsors trying to explain the policy as we know it, and trying to understand if they desire to continue their participation. And so—hopefully by the end of next month, all of our sponsors collectively will have an opportunity to get together and we will know—and then of course as the policy is further developed, and we have additional information with which to explain, to include the benefit of sitting here listening to you all yesterday.

Mr. MYERS. I guess that is part of your job to sit there and listen to it, isn't it?

General HARRELL. Yes, sir.

Mr. MYERS. I am not at all sure what the Congress is going to do, both the Senate and House, on the proposal made by the administration. But as you heard yesterday, there are serious questions by Members of this committee anyway who have lived with this problem through the years and have experienced both the good days and now the bad days. I call them bad days because my predecessor, Mr. Bevill, spent all the money before he handed the gavel over to me, as I mentioned yesterday.

General HARRELL. But if I may add, as a departing member of the Corps, I think it is a great testimony for the U.S. Army Corps of Engineers that you all gave yesterday about the value of the Corps, not only parochially for you but, as you have seen it for the Nation, and I am proud to be a part of that.

Mr. MYERS. Well, I think certainly the Corps has done a tremendous job in meeting the needs, both in flood control, as well as navigation, and other responsibilities that it has met, and that seemed to be changing the mission considerably if this new proposal is given its approval by the Congress. I think there is a serious question, but I am not about to predict what may happen and I don't think anyone can really, but I do think it is going to be—I don't believe it is going to be implemented this year for the 1996 budget. I think if it is done, it is going to come too late. So I think we have to back off and as Mr. Rogers said yesterday, we have to back off and assume it is not going to be done and we have to address it from a different direction.

But I am concerned that we go along with all these local projects, which are obviously not going to meet their criteria, if we are not going to continue it. Why do we spend money even on the studies?

General HARRELL. That is exactly right, and I have to make tremendous effort, not a tremendous effort, but a little bit of effort to clean up some of that in my region, and I will—we will start doing that. We will start doing it now. If I could do that.

Mr. MYERS. With a reduced number of people, too?

General HARRELL. Yes, sir.

RESTORATION OF SALMON

Mr. MYERS. Well, the big problem I have now is the next question, is what you touched on there, is the saving of the juvenile salmon.

General HARRELL. Yes, sir.

Mr. MYERS. Something this committee has been concerned about over the years, and I am troubled if we are doing the right thing, and I guess you had the biological opinion coming out in March; is that right?

General HARRELL. Well, we had hoped—I had hoped to testify today that that Biological Opinion was made public today but I understand now it has been delayed until the first of March.

Mr. MYERS. That is just a week off, isn't it?

General HARRELL. Yes, sir.

Mr. MYERS. I think we all want to save the salmon, but is the Columbia River and the Snake River the only rivers that the salmon use?

General HARRELL. No, sir.

[CLERK'S NOTE.—General Harrell provided additional clarifying information as follows:]

The endangered salmon listed by the National Marine Fisheries Service are unique to the Snake River Basin.

Mr. MYERS. Well, then, I am concerned about how serious this problem is if we did nothing and we have already done a lot. We have built ladders on a number of these dams, but salmon coming downstream don't use the ladders. Is that what the problem is? The juvenile gets into the——

General HARRELL. If the turbines are running, the juveniles will get into the turbines and of course they are subject to be killed or lost, I guess is, the better word.

You raise an issue that for the first time in almost four years that I have not heard anybody raise, except Senator Gorton—and most folk will stop short when they talk about salmon and the restoration of salmon, as opposed to the cost and the economic benefits for doing so.

I think last month I read an article where you said that maybe we are at that point, that maybe we can't save the salmon in the Snake and the Columbia.

I don't know. You all will deal with the Endangered Species Act——

Mr. MYERS. Now, how have we——

General HARRELL [continuing]. This summer, and whether or not economic benefits will be up front as you look to go through and work through the process. I don't know what you all will do with that. But it will have, one way or another, it will have an interesting impact on our efforts, not only our efforts, but the other Federal agencies to include states and the tribes.

Mr. MYERS. It has always troubled, I will say, this committee, and me particularly, that when it comes to doing something for human beings, we have to meet a benefit cost ratio. Something, wildlife, environment, forget it. It may cost a billion dollars to save 10 fish, but it is worth it if it is wildlife, and I am exaggerating here, but we throw away a benefit cost ratio, ignore it if it is for wildlife, but for human beings we have to meet this criteria.

I have always questioned the priorities in this country. I guess we would have dinosaurs running down the highway if some people had their way. We didn't cause the loss of the dinosaur, but it does trouble me with that salmon restoration—it is not restoration, it is saving it.

Do we have any figures about the percentage of salmon that use the Snake-Columbia River versus the others? What proportion of them go up that river that get into the turbines?

General HARRELL. Every agency will use their own figures. We try to stay away—I have tried to stay away from using figures—and leave that to the fish and wildlife people at NMFS. We can't, however, escape dealing with numbers of fish both migrating to the ocean and those returning to the spawning areas.

I am hearing on occasion, for an example, one stock of salmon that is listed as endangered is the sockeye, which is in the Snake River, only that one or two fish are returning.

Mr. MYERS. That is adult fish coming back.

General HARRELL. That is adult fish returning back from the ocean. Of course we supplement natural fish, that is, fish that have spawned naturally and migrate—live and migrate in the rivers, in tributaries to the Snake, the Snake and the Columbia, with hatchery fish.

Now, that is an interesting issue because the environmentalists don't believe that that is the way in which to conserve or save the salmon. Some would advocate taking the dams out to allow the fish to migrate up and down the river in a natural state.

Mr. MYERS. Well, Bonneville operates all of the turbines, don't they?

General HARRELL. No, sir. That is an issue that used to bother me. It doesn't anymore. We generate the power.

Mr. MYERS. They buy the power, though, you generate.

General HARRELL. That is right. They market the power that we generate.

Mr. MYERS. I guess I put the wrong question.

Well now, I am getting into something here, the fish ladders the adult salmon use to go upstream, I had forgotten the configuration there. Aren't there some tributaries moving into the Columbia below the first dam site, you can force the fish—they don't have to go to—they can use the tributaries to spawn instead of going all the way up the Snake?

General HARRELL. But this salmon fish is a unique character. It goes back from whence it was spawned, whether it is a tributary, such as the Willamette, which is probably your first major tributary as you come up the Columbia, or up the Snake into several other tributaries. I mean—this fish is spawned in fresh water and it lives in fresh water for two or so years. Then it migrates below Bonneville and prepares itself to enter into salt water. It then goes in the salt water in the Pacific as far as Alaska and other places. Then it comes back to the mouth of the Columbia and it assimilates back into a fresh water fish. It goes back—in fact, to the hatchery where it spawned. Isn't that interesting? They knock on the doors of the hatcheries.

Mr. MYERS. They want to hatch.

General HARRELL. Yes, sir.

Mr. MYERS. Well, here again, I am certainly not a biologist. I don't know what the answer is. It seemed to me they could be encouraged to go up a different stream and once they have laid their eggs up there, then in the future they go up to that stream instead of going up into the far reaches of the Columbia and Snake.

General HARRELL. Yes, sir, I would——

Mr. MYERS. What bothers me, last year you got $36 million, I believe. This year it is up to $78 million. That is more than a 100 percent increase.

General HARRELL. Yes, sir.

Mr. MYERS. And still we don't know for sure what we are doing.

General HARRELL. Yes, sir.

Mr. MYERS. That troubles me—and of course we are not going to be marking up this bill—hopefully, you will have the biological opinion by then which may change the direction here somewhat, but it seems to me we are spending an awful lot of money on something when we are not sure whether we are accomplishing the right thing. I guess we have tried screens in front of the——

General HARRELL. Yes, sir. The turbine intakes——

Mr. MYERS. Do the juvenile fish go to all levels? You couldn't locate the intakes in a different location to escape? Has that been explored?

General HARRELL. We are now experimenting with a concept that is called "surface collection." We are also extending the length of the screens. We are looking at those two options as a way of trying to collect juvenile fish at the dams and then put them in barges and trucks and get them around the structure to avoid going through the turbines as well as being consumed by predators, such as the squawfish. It is not easy and it is very pricey to do all of this.

Mr. MYERS. It certainly is. Wonder if the salmon are worth that much.

General HARRELL. Well, I wish the science was such that we could get a direction in which to move. I mean, obviously, the taxpayers would benefit from that.

Mr. MYERS. Are there any experiments being conducted now as far as relocating the intakes for the——

General HARRELL. Yes, sir.

Mr. MYERS. Turbines?

General HARRELL. Yes, sir. I have about $20 million this year to look at several different system configurations for modifying dams to get juvenile fish around these structures without going through turbines and without being exposed too long to predators.

I can provide you a list of all of those.

Mr. MYERS. If you would for the record.

General HARRELL. Yes, sir.

[The information follows:]

JUVENILE FISH BYPASS SYSTEMS

Of the eight mainstem dams, The Dalles is the only dam that does not have operating screens in front of the turbine intakes. We are constructing extended length screens at Lower Granite, Little Goose and McNary dams and studying the feasibility of extended screens at John Day. Design for screens at The Dalles is underway, but we have delayed construction while we evaluate a new technology for a surface-oriented bypass. Such a system, if successful, could be used to supplement or replace conventional screens. We are continuing to evaluate improvements to our existing program for barging juvenile fish past the dams. Also, we are examining proposals to draw down reservoirs which would speed the flow of water and expedite juvenile migration downstream.

Mr. MYERS. And the other thing, debris. It would follow the screens, floats on the surface, doesn't it? How much—down 40 feet? Very much?

General HARRELL. Not too much. These are what we call traveling screens. These are screens made of a mesh sort of material that will allow water to go through, but not fish, they are designed so that the fish will not be impinged upon the screen. You mentioned debris. It will all be washed off.

Mr. MYERS. It seemed to me—that was my next question. It seemed like you could have a circular screen and on the reverse side having the air blowing the debris off of it.

General HARRELL. We have devices that will brush it off.

Mr. MYERS. Brush it off. It will come right back on. Air could blow it away, some distance away. I don't know, I am not an engineer but it seems to me a brush would not be as effective as the air would be to start blowing it away, and go downstream again.

Anyway, we are concerned about this tremendous increase. So if you would for the record provide how this increase would be used?

General HARRELL. Yes, sir.

[The information follows:]

INCREASED FUNDING FOR COLUMBIA RIVER JUVENILE FISH MITIGATION

Our allocation of funds for this project in Fiscal Year 1995 is $31.8 million. In Fiscal Year 1996, our requirement is estimated to be $78.8 million, an increase of $47.0 million over this year. The increase is primarily due to the construction of extended length screens at Lower Granite, Little Goose, and McNary dams. This work will begin in 1995, and Fiscal Year 1996 will be a period of high contractor earnings, resulting in an increase of about $22 million over Fiscal Year 1995. Another major item, accounting for $17 million, is the increased requirement in the Mitigation Analysis to build and test prototypes of surface-oriented bypass systems. The balance of the increase is mainly due to the construction of juvenile fish monitoring facilities at Bonneville and John Day dams.

Mr. MYERS. Because the committee is concerned about the salmon, as we all are, but we are also concerned about—my last question is, who is going to pay for this? Is it Bonneville that is going to recover? And the rates, the rates are pretty high right now.

General HARRELL. Ratepayers are paying for most of it.

Mr. MYERS. I am sorry?

General HARRELL. Ratepayers, they pay for that indirectly and we get funded indirectly from the Bonneville Power Administration. Those funds go into the Treasury and, of course, the monies which you appropriate are reimbursed by the Bonneville Power Administration.

Mr. MYERS. So it is costly to the taxpayer, costly certainly to the ratepayers in the Bonneville area, which we are also concerned with.

General HARRELL. Yes, sir.

Mr. MYERS. Well, each of the Members—even though I am sorry more Members aren't here this morning, as you know, we are kind of spread thin. We are trying to conduct other hearings also and a rescission package that is going through each one of the committees. So I apologize more Members aren't here, but we will have some additional questions we will provide for you.

[The information follows:]

NEW GI STUDY AUTHORITY

Mr. MYERS. Please provide for the record the authority for each of the new studies included in your Fiscal Year 1996 budget request.

General HARRELL. Sir, the Alaska District's Fiscal Year 1996 new start studies, Chena River Watershed, Kuskokwim River and Nome Harbor Improvements, are all being accomplished under the authority of the Resolution by the House Committee of Public Works, Rivers and Harbors of Alaska, adopted 2 December 1970. The Seattle District's Fiscal Year 1996 new start studies, Duwamish Green River Basin and Stillaguamish River Basin, are being accomplished under the authority of Puget Sound and Adjacent Waters by Flood Control Act of 1962, Section 209, Public Law 87-874. The authority for the Mount St. Helens Environmental Restoration, Washington study, the Portland District's fiscal year 1996 new start, is Section 216 of Public Law 91-611, Review of Completed Projects. The Walla Walla District's fiscal year 1996 new study start, Walla Walla River Watershed, Washington and Oregon is authorized by Resolution adopted by the Senate Committee on Public Works adopted 27 July, 1962.

KUSKOKWIM RIVER, ALASKA

Mr. MYERS. Will the computation of benefits for the Kuskokwim River, Alaska, project include cost savings associated with the replacement of old fuel storage tanks with smaller tanks?

General HARRELL. Yes, sir. We will evaluate the cost savings for the replacement of old fuel storage tanks and the resulting contribution to national economic development. The study will look at extending the navigation season along the Kuskokwim River. This would allow for more frequent fuel deliveries and the need for smaller fuel storage tanks.

CHENA RIVER WATERSHED, ALASKA

Mr. MYERS. Will the Chena River Watershed, Alaska, study examine the high groundwater flooding problems experienced in North Pole, Alaska?

General HARRELL. Yes, sir. The focus of the Chena River Watershed study is to address the concerns for fish and wildlife impacts from population growth and related development in the Fairbanks, North Pole, Fort Wainwright, and other areas of the Chena River watershed. High ground water created by operation of the Chena River flood control project is considered a possible contributing factor to flooding. A ground water study is presently underway for the North Pole and adjacent area downstream of the project, which is due to be completed in November 1995. The results of this study will be incorporated into the Chena River Watershed study and also will be available for local development planning in the North Pole area.

WALLA WALLA RIVER WATERSHED, WASHINGTON AND OREGON

Mr. MYERS. You indicate that the Washington Department of Ecology has initiated watershed planning efforts in the Walla Walla River Basin. Why is it necessary for the Federal Government to initiate its own watershed planning effort?

General HARRELL. Sir, the watershed planning efforts initiated by the Washington Department of Ecology is specifically limited to the purpose of state rule making. It is not a comprehensive study of the whole Walla Walla River basin involving the states of both Oregon and Washington. The watershed study of the basin that would be undertaken by the Corps of Engineers would be totally comprehensive, in that it would address water resources, environmental protection and restoration, including anadromous fish, in Oregon and Washington. The Washington Department of Ecology does not have the jurisdiction for the portion in Oregon, and has therefore sought Corps of Engineers' assistance.

DUWAMISH-GREEN RIVERS BASIN, WASHINGTON

Mr. MYERS. Why should the Corps of Engineers be responsible for habitat restoration activities in the Duwamish-Green Rivers Basin in Washington?

General HARRELL. Sir, the Corps is responsible for the impact of our projects on the environment. King County, Native American tribal governments, special interest groups, State resource agencies, and interested citizens are aware that the fish and wildlife habitat of the Duwamish-Green River Basin has been significantly altered by the Corps of Engineers with dredging and filling projects in the lower river delta, levee construction, and the construction of Howard Hanson Dam in the upper basin. Accordingly, local interests believe the Corps should be responsible for restoring the impacted habitat, and are aware of sections in Public Law that provide appropriate authority.

Mr. MYERS. Is there a legal requirement for you to undertake habitat restoration in the Duwamish-Green Rivers Basin?

General HARRELL. Sir, there is no legal requirement for the Corps to undertake habitat restoration in the Duwamish Green Basin. However, local interests desire our assistance and we have authority for the study.

STILLAGUAMISH RIVER BASIN, WASHINGTON

Mr. MYERS. Why should the Corps of Engineers take the lead in habitat restoration efforts in the Stillaguamish River Basin in Washington?

General HARRELL. Sir, historically, the Corps of Engineers has altered fish and wildlife habitat in this river basin with revetment, channelization, and bank stabilization projects. Local interests have requested that the Corps of Engineers take the lead in the restoration efforts on the Stillaguamish River basin, and we have the authority to undertake such studies.

ANCHOR POINT HARBOR, ALASKA

Mr. MYERS. Is the Anchor Point Harbor, Alaska, project a contributor to the Harbor Maintenance Trust Fund?

General HARRELL. Sir, based on the results of the reconnaissance study, this harbor would not contribute to the Harbor Maintenance Trust Fund, because of the types and destinations of commercial cargo. During the feasibility phase a final determination would be made on the requirement to contribute to the Harbor Maintenance Trust Fund.

COOK INLET, ALASKA

Mr. MYERS. When was the feasibility cost sharing agreement for the Cook Inlet, Alaska, study executed?

General HARRELL. Sir, the Cook Inlet, Alaska, feasibility cost sharing agreement was executed on 6 January 1994.

NORTHERN SEA ROUTE, ALASKA

Mr. MYERS. Will the Northern Sea Route, Alaska, study be limited to an examination of navigation improvements at the ports of Alaska?

General HARRELL. Yes, sir. The study will examine possible improvements of Alaska ports required by the improved Northern Sea Route. Russian ice breakers regularly lead convoys of ice strengthened ships through the Northern Sea Route at the present time. While other possible ports in Russia could compete for the marshalling and transshipment site, Alaska ports such as Kodiak and Unalaska are the only logical United States sites from which to originate these convoys.

PUGET SOUND, WASHINGTON

Mr. MYERS. What percent of the material that would be placed in confined disposal sites in Puget Sound, Washington, would come from Federal navigation projects?

General HARRELL. Sir, under current sediment testing criteria, an estimated 15 to 20 percent of the material that would be placed in confined disposal sites would come from Federal navigation projects. At least half of this material would come from portions of Federal navigation projects maintained by local interests, principally public ports.

COLUMBIA SLOUGH, OREGON

Mr. MYERS. You state that the Fiscal Year 1996 funds requested for the Columbia Slough, Oregon, project will be used to complete the reconnaissance phase of the study. However, you also indicate the reconnaissance phase will be complete this September. What is correct?

General HARRELL. Sir, the reconnaissance report is scheduled for completion this September; we are scheduled to complete the reconnaissance study phase in September 1996.

DILLINGHAM, ALASKA

Mr. MYERS. What is the status of the Dillingham, Alaska, study?

General HARRELL. Sir, a preliminary reconnaissance study completed in December 1994 for the Dillingham Storm Damage Reduction, Alaska, project found no economic justification for protection. However, the Alaska District is proceeding with a shoreline erosion project at Snag Point in Dillingham, as directed by Congress. Construction, General funds are being used to complete a decision document, execute a PCA and initiate work on the plans and specifications.

SEWARD, LOWELL CREEK, ALASKA

Mr. MYERS. What is the status of the Seward, Lowell Creek, Alaska, study?

General HARRELL. Sir, the Seward, Lowell Creek, Alaska study has been terminated because the sponsor considered the project a low priority for the community and had insufficient funds to continue with the cost shared feasibility study.

LOWER BOISE RIVER AND TRIBUTARIES, IDAHO

Mr. MYERS. What is the status of the Lower Boise River and Tributaries, Idaho study?

General HARRELL. Sir, the Lower Boise River and Tributaries Study is in the reconnaissance phase, with reconnaissance studies focusing on flood damage reduction, environmental restoration, and water supply. The reconnaissance report is scheduled for completion on 31 May 1995.

AMAZON CREEK WETLANDS, OREGON

Mr. MYERS. What is the status of the Amazon Creek Wetlands, Oregon study?

General HARRELL. Sir, the Portland District initiated the feasibility study phase on 2 September 1994 under Section 1135 of the Water Resources Development Act of 1986, as amended. The District Engineer's Project Modification Report is scheduled to be completed in December 1995.

JOHNSON CREEK, OREGON

Mr. MYERS. What is the schedule for execution of the feasibility cost sharing agreement for the Johnson Creek, Oregon, study?

General HARRELL. Sir, the current schedule is to execute the feasibility cost sharing agreement and to initiate the feasibility study in July 1995. It is our understanding the project sponsor, the city of Portland, is now in a position to negotiate the scope of the feasibility study. The Project Study Plan has been on hold, awaiting completion of the city's Johnson Creek Resource Management Plan.

MIDDLE FORK WILLAMETTE FISHERY RESTORATION, OREGON

Mr. MYERS. What caused the delay in initiation of the Middle Fork Willamette Fishery Restoration study in Oregon?

General HARRELL. Sir, the Middle Fork Willamette Fishery Restoration Study is closely related to the ongoing South Santiam Fishery Restoration study. The Oregon Department of Fish and Wildlife, the U.S. Fish and Wildlife Service, the National Marine Fishery Service, and the Corps agreed that it would be beneficial to delay the start of the Middle Fork Willamette Fishery Restoration study until results are obtained from the South Santiam study. The South Santiam study will reveal key information on the feasibility of juvenile fish collection facilities upstream of the reservoirs, which is a major concern for the Middle Fork Willamette River reservoirs as well.

WILLAMETTE BASIN, OREGON

Mr. MYERS. Is the Corps legally responsible for restoring fish runs in the Willamette basin in Oregon?

General HARRELL. To the extent that Corps projects impact fish, the Corps has authority and responsibility to take appropriate mitigation actions to mitigate and support fish runs as established in the original authorizing documents. Most of the projects in the Willamette River Basin were authorized by the Flood Control Act of 1950, dated 17 May 1950, House document 531, including authorization for mitigation measures and hatcheries. In addition, the Endangered Species Act requires Federal agencies to take appropriate actions to assist in restoring endangered and threatened species. The Fish and Wildlife Coordination Act of 1958, as amended, requires, among other things, that fish and wildlife conservation shall receive equal consideration with other project purposes. Some of the Willamette River Basin Waters are also the subject of other special laws, including the Scenic and Wild River Act, The Willamette Greenway, and various Wilderness Acts that also place other restrictions and obligations on Corps projects. In summary, as indicated, there are several authorities for fish restoration.

COOS BAY, OREGON

Mr. MYERS. Is the Coos Bay, Oregon, project authorized for construction?

General HARRELL. No, sir. However, the plans and specifications are nearly complete and we are prepared to initiate construction upon project authorization, receipt of appropriations, and the execution of the project cost-sharing agreement with the sponsor.

BLUE RIVER AND COUGAR LAKES, OREGON

Mr. MYERS. Why will the temperature control devices at Blue River and Cougar Lakes in Oregon be funded at full Federal cost?

General HARRELL. Sir, installation of temperature control facilities at these two projects will be funded in accordance with guidance set forth in the Conference Report 103-672 accompanying Public Law 103-216, the Energy and Water Development Act of 1995. That report supports installation of the temperature control facilities as project modifications which mitigate for impacts of the Cougar and Blue River projects. The cost of the facilities would be allocated according to original project purposes. Costs determined to be allocable to power are reimbursable from power sales revenues.

ELK CREEK LAKE, OREGON

Mr. MYERS. For the Elk Creek, Oregon, project, what is the benefit-cost ratio for completion of the project with no conservation pool?

General HARRELL. Sir, the benefits are based upon the latest available evaluation performed in June 1983 at 1983 price levels. Based upon these benefits, the remaining benefit-remaining cost ratio for the no conservation pool alternative, evaluated as the last added increment, is 0.61 to 1 at the authorized rate of 3 1/4 percent. The ratio is 0.17 at the current rate of 8 percent. The total benefit-cost ratio, including expenditures to date, is 0.36 at the authorized rate.

Mr. MYERS. What is the benefit-cost ratio for the project with conservation storage?

General HARRELL. Sir, the benefit-cost ratio to complete the project with conservation storage has not been computed recently because the project is in a continuing construction status. The ratio would be similar to the no-conservation-pool since the remaining construction cost is approximately the same, and the additional benefits from water supply, irrigation, and recreation are not expected to be realized in the foreseeable future. The benefit-cost ratio for the fiscal year in which Congress first appropriated construction funds, Fiscal Year, 1971 was 1.01 to 1 at a 3 1/4 percent rate, and was based on the project fair share of system benefits, not an incremental analysis.

COLUMBIA RIVER JUVENILE FISH MITIGATION, OREGON, WASHINGTON, AND IDAHO

Mr. MYERS. Last year $36,300,000 was provided for the Columbia River Juvenile Fish Mitigation effort. This year you are requesting $78,800,000. The Committee is aware that there remain significant differences of opinion among all the parties in the Pacific Northwest about the steps that need to be taken to restore threatened and endangered fish runs in the Columbia-Snake River system. Are you concerned that we seem to be throwing large sums of money at this problem even though no consensus has been reached on what needs to be done to restore the salmon runs?

General HARRELL. The funding provided for restoration of the salmon including the endangered Snake River salmon is indeed large and we are concerned that this money be used wisely. A consensus has been difficult to reach but I believe it is beginning to emerge. The National Marine Fisheries Service has released its biological opinion on Columbia River hydro-operation and soon will publish a draft recovery plan that addresses comprehensively all major elements of salmon recovery. We have and will continue to consult with the National Marine Fisheries Service to obtain that agency's biological views on the actions needed to preserve and rebuild the salmon runs. We will continue to look for every avenue to ensure that the most cost-effective means of protecting the fish are identified and considered, and implemented.

Mr. MYERS. Please provide for the record a breakdown of the total estimated cost of the Corps' part of this effort by project along with a description of how the funds will be used.

General HARRELL. Sir, the Columbia River Juvenile Fish Mitigation, Washington, Oregon and Idaho project provides mitigation for the impact of Corps dams on migrating juvenile salmon and steelhead in the Columbia and Lower Snake Rivers. The Corps of Engineers cost estimate is $583,600,000 and funds contributed by Bonneville Power Administration amount to $4,300,000, bringing the total estimated project cost estimate to $587,900,000. This project which consists of nine sub projects, we believe is consistent in large measure with the blueprint for salmon recovery that the National Marine Fisheries Service has set forth in the biological opinion, and in its soon to be released draft recovery plan.

I will provide for the record a breakdown of the total estimated project cost, along with a description of the main work items for each of the nine sub projects.

(The information follows.)

TOTAL ESTIMATED PROJECT COST
COLUMBIA RIVER JUVENILE FISH MITIGATION

The principal elements of work are:

(1) Continued construction of juvenile fish bypass and transportation facilities at Lower Granite, Little Goose, Lower Monumental, and Ice Harbor on the Snake River, and McNary and The Dalles on the Columbia River.

(2) A mitigation analysis, prepared in cooperation with regional interests, to study additional measures to increase juvenile fish survival at Corps dams on the mainstem Columbia and Snake Rivers. The mitigation analysis will provide the Corps of Engineers and the other Federal operating agencies with the analytical basis necessary to support and respond to regional and National Marine Fisheries Service salmon recovery initiatives.

(3) Advanced planning and design for modifications of public and private facilities affected by operating the John Day pool at minimum levels. Juvenile fish monitoring facilities at John Day.

(4) Juvenile fish monitoring facilities and outfall relocation at Bonneville.

The nine sub projects, their major work items, and cost breakdown are displayed in the following table:

ANALYSIS OF TOTAL PROJECT COST ESTIMATE
COLUMBIA RIVER JUVENILE FISH MITIGATION

	($ Millions)
Lower Granite Lock & Dam	36.8
*Extended Screens	
*Fish Loading Improvements	
*Barge Moorage Expansion	
*Fish Transportation Barges	
Little Goose Lock & Dam	37.0
*Extended Screens	
*New Holding and Loading Facility	
Lower Monumental Lock & Dam	34.7
*Screened Bypass	
*Holding and Loading Facility	
Ice Harbor Lock & Dam	27.8
*Screened Bypass	
McNary Lock & Dam	82.0
*Extended Screens	
*Holding & Loading Improvements	
John Day Lock & Dam	19.8
*Advanced Planning & Design for Modifications of Public and Private Facilities Affected by Operating John Day Pool at Lowered Levels.	
*Juvenile Fish Monitoring	
The Dalles Lock & Dam	
*Extended Screen Bypass	124.4
Bonneville Lock and Dam	72.4
*Juvenile Fish Monitoring Facilities (Includes $4.3 Million funded by BPA)	
*Juvenile Fish Outfall Relocation	
Mitigation Analysis	153.0
*System Configure Studies	
*Reservoir Drawdown Testing	
*John Day Extended Screen Study	
*Surface Collection Studies	
*Gas Abatement Studies	
*Other Interim Studies and Activities	
TOTAL Project Cost Estimate	**587.9**
(Bonneville Power Administration 4.3)	
(Corps of Engineers Appropriations 583.6)	

Mr. MYERS. You indicate that the Bonneville Power Administration will fund the design of juvenile fish monitoring facilities at the Bonneville project. How much will Bonneville Power Administration contribute in Fiscal Year 1996?

General HARRELL. Sir, the Bonneville Power Administration has advised us that it will contribute $1,056,000 in Fiscal Year 1996.

Mr. MYERS. Why wouldn't it make more sense to wait for the results of the mitigation analysis before processing with costly modifications to the projects?

General HARRELL. Sir, the construction items currently in this project are proven means of protecting migrating salmon and are consistent with the biological opinion that the National Marine Fisheries Service has completed. The region and federal agencies see a need to carry them out as quickly as possible. Potential future actions such as gas abatement structures, surface oriented bypass, and reservoir drawdowns are under consideration and the Corps is studying them through the Mitigation Analysis.

Mr. MYERS. Will all costs associated with this program eventually be repaid by the power users. If not, what percentage of costs will be repaid?

General HARRELL. Sir, not all cost associated with this program will be repaid by the power users. Each project has a joint cost allocation that determines the eventual amount that the power users will repay the treasury. Over the eight mainstem Columbia-Snake projects, that averages out to about 81 percent of the costs being allocated to power, with the remainder to navigation and flood control.

Mr. MYERS. Has it ever been conclusively determined what the mortality rate is for juvenile fish passing through the turbines?

General HARRELL. Sir, the Corps has funded a series of studies, since the 1940's, to determine the mortality rates for juvenile fish passing through the turbines. It has been found that the mortality rate varies over a wide range, depending on type of turbine, efficiency of the turbine, type of fish, and other mechanical/structural factors. At Lower Granite Dam, recent direct mortality estimates were 6 percent for spring migrants compared with past estimates of up to 17 percent. At Bonneville Dam, the mortality estimates have varied from 2 to 15 percent for juvenile fall chinook. Estates at the other dams have ranged from 10 to 20 percent for all juvenile chinook.

Mr. MYERS. Of the funds requested, how much is for work to be initiated in Fiscal Year 1996?

General HARRELL. Funds in the amount of $15,000,000 would be used in fiscal year 1996 to start the following items: Construction of the juvenile fish monitoring facilities at Bonneville and John Day. Construction of vertical barrier screens at Little Goose, Lower Granite, and McNary. Consideration of the gate raise modifications at Lower

Monumental and McNary. The remainder of the fiscal year 1996 fund request will be used to continue ongoing studies, design, and construction for the nine sub-projects.

GRAYS HARBOR, WASHINGTON

Mr. MYERS. Please provide the Committee with a status report on the Grays Harbor, Washington, project.

General HARRELL. Sir, deepening of the 20-mile downstream channel was started in April 1990 and completed in February 1991. Fish and crab mitigation measures were completed by mid 1992. The remainder of the project consists of a modification of the existing Union Pacific railroad bridge and four miles of upstream channel dredging, and is currently unscheduled. Corps work on railroad bridge design was stopped in 1994 pending resolution by local interests of railroad bridge issues external to the Corps project. The Port of Grays Harbor is working with other local interests to resolve the issues. After all issues are resolved, work on the bridge design could be restarted, leading to the bridge modification. Until them, the existing bridge will not be improved. If resolution can not be reached, the bridge will have to be removed by the railroad. In either case, upstream channel dredging could occur as the bridge work is completed.

BONNEVILLE SECOND POWERHOUSE, OREGON AND WASHINGTON

Mr. MYERS. Can the Bonneville Second Power house be operated when juvenile fish are present?

General HARRELL. Yes, sir. However, both the first and the second powerhouse operations are limited during the juvenile fish passage season because of less than ideal passage conditions. The project is operated to provide spill to enhance passage of the juvenile fish.

GRAYS HARBOR, WASHINGTON (SOUTH JETTY BREACH)

Mr. MYERS. Please provide the Committee with a status report on your efforts to repair the breach south of the south jetty at the Grays Harbor and Chehalis River, Washington, project.

General HARRELL. Sir, since completing the breach fill in November 1994, the Corps and locals have reached agreement that additional material placement is not needed at this time. Presently, Seattle District is developing plans to reconfigure some of the placed fill to increase its life. This work would be done this spring. A study of long-term maintenance solutions is being carried out in cooperation with local and state representatives and will be completed in September 1995.

FEDERAL DREDGE WORK

Mr. MYERS. Could you tell me how many times in the past two years has the North Pacific Division declared a dredging "emergency" allowing the Corps to bring a federal dredge on scene?

General HARRELL. Sir, North Pacific Division has not declared a dredging emergency in the past two years.

Mr. MYERS. Didn't the NPD recently declare dredging work in the Ventura, California area to be an emergency and begin to bring a federal dredge down from the northwest even though the work had been advertised for bid last fall and had received 4 bids within the government estimates?

General HARRELL. Sir, North Pacific Division did not declare the need for dredging work in the Ventura, California area to be an emergency. The declaration of emergency was first established by Ventura, Santa Barbara, and Los Angeles counties. President Clinton declared parts of southern California "major disaster areas" in a message dated 10 January 1995. The declaration was based on the imminent failure of the detached breakwater at Ventura Harbor and rapid shoaling of the entrance, which jeopardized safe navigation.

North Pacific Division did answer an inquiry on 18 January 1995, by Los Angeles District, South Pacific Division, as to the availability of the Federal dredge Yaquina to dredge Ventura Harbor. Portland District, North Pacific Division, reported that the dredge could be made available and mobilized to Ventura Harbor by 15 February 1995.

The dredging work was advertised for bid in the fall of 1994. However, Los Angeles District chose not to award the contract due to a lack of shoaling in the project. Four bids were within the government estimate.

Mr. MYERS. Also, isn't it true that the Corps was planning to bring a federal dredge in from the northwest to do the work in Ventura Harbor even though two private dredges were already available on area?

General HARRELL. Sir, at the request of South Pacific Division, in response to the problem at Ventura Harbor, we did have preliminary plans to mobilize the dredge Yaquina to the Ventura project by 15 February 1995.

Mr. MYERS. What was the eventual outcome of this work?

General HARRELL. Sir, the eventual outcome of the emergency dredging work was the award of a contract to Manson Construction Company for $1,154,679 on 1 February 1995 by Los Angeles District, South Pacific Division. The dredging work started on 5 February 1995 and was completed on 20 February 1995. The breakwater repair of the detached breakwater at Ventura Harbor is scheduled for completion in March, 1995.

CLOSING REMARKS

Mr. MYERS. We appreciate your testimony this morning. As usual, you all do an excellent job and you have got a tremendous job and we wish you very well in your—as you change hats. When is it going to be?

General HARRELL. Oh, I guess I owe my boss at least a 60-day notice. That could be in May.

Mr. MYERS. You will give him notice in May, then?

General HARRELL. No, sir. I am going to give him notice maybe tomorrow.

Mr. MYERS. Stan, are you ready?

Well, thank you very much, General. We wish you very much luck. Thank you for all your duty here. We appreciate it. The committee will stand adjourned until 2:00 p.m. today.

WEDNESDAY, FEBRUARY 22, 1995.

SOUTH ATLANTIC DIVISION

WITNESSES

BRIG. GEN. RALPH V. LOCURCIO, DIVISION COMMANDER
WILLIAM H. OSBORNE, CIVIL ENGINEER, P.E., CHIEF, CIVIL PROGRAMS DIVISION
BRIAN D. TARRAS, CIVIL ENGINEER, P.E., ASSISTANT CHIEF, CIVIL PROGRAMS DIVISION

Mr. MYERS. The committee will come to order.

The committee is pleased to welcome General Locurcio once again, and your staff, some who have been around for quite awhile, too. We are pleased to hear from you today. Your entire statement will be in the record and you may proceed as you care.

INTRODUCTION

General LOCURCIO. Thank you very much, Mr. Chairman, distinguished Members of the committee, I am pleased to appear before you again, this time to report on the Civil Works activities of the South Atlantic Division. Assisting me are Mr. Bill Osborne to my right, and Mr. Brian Tarras to my left, from my Civil Programs Division, and also with me today is Mr. John Rushing, Director of Programs Management, who is sitting behind me today.

DIVISION AREA

The South Atlantic Division is responsible for Civil Works activities in all or part of seven southeastern States, Puerto Rico and the Virgin Islands. This area covers about 260,000 square miles and includes about 13 percent of the national population.

FISCAL YEAR 1995

Before I mention the President's fiscal year 1996 Budget Request, I would like to highlight some activities that will be completed with funds previously provided. These include correction of downstream navigation problems at the William Bacon Oliver Lock and Dam in Alabama; construction of sand bypass and channel deepening at Canaveral Harbor in Florida; removing rock from the entrance channel at Wilmington Harbor, North Carolina; deepening the channels at Gulfport Harbor in Mississippi; and raising the spillway and dam at Falls Lake in North Carolina.

OVERALL BUDGET

The President's fiscal year 1996 Budget Request includes $386.4 million for Civil Works activities in the South Atlantic Division. This amount, together with $30.1 million of unobligated programmed carryover funds from fiscal year 1995, results in a total program of $416.5 million for fiscal year 1996. I will highlight some of our progress and planned activities.

GENERAL INVESTIGATIONS

The General Investigations request of $8.8 million will allow for the planning, evaluation, engineering, and design of solutions to water resource problems throughout this region such as a new study to address navigation problems at Georgetown Harbor in South Carolina; new studies to address flood damage protection measures for the watershed in Atlanta, Georgia, and along the Waccamaw River in South Carolina. A comprehensive basin review of the Santee, Cooper, and Congaree River system in South Carolina will be initiated. New studies will determine the disposition of the New Savannah Bluff Lock and Dam in Georgia; modification to abandon the Island Creek Dam and Pump Station at the John H. Kerr Dam and Reservoir in Virginia; and whether the authorized plan of improvement for Crown Bay Harbor in the Virgin Islands remains justified.

CONTINUING

NAVIGATION

We are continuing navigation studies to improve the Alabama River channel below Claiborne Lock and Dam to support barge traffic; deepen the main ship channel being Jacksonville Harbor to accommodate larger vessels now being used in the world fleet; deepen the Brunswick Harbor, Georgia, project to support bulk cargo and container vessels; extend the Savannah Harbor, Georgia, project to a new container port; widen and deepen the Cape Fear, Northeast Cape Fear Rivers in North Carolina to accommodate Panamax vessels; and improve the Charleston Harbor in South Carolina for use by larger container and bulk cargo vessels.

FLOOD DAMAGE PREVENTION

We are conducting flood prevention studies for existing and new projects along the entire coast of Florida; and for residential and commercial developments in Hancock, Harrison, and Jackson Counties in Mississippi.

PRECONSTRUCTION ENGINEERING AND DESIGN

NAVIGATION

We will continue preconstruction engineering and design efforts for navigation improvements for Hillsboro Inlet and deepening the navigation channels in Panama City Harbor in Florida; and widening the main ship channel in Wilmington Harbor, North Carolina.

FLOOD CONTROL

We will continue design on flood control measures for the shore front development of the Brunswick County beaches in North Carolina, and for many towns along the Arecibo River and the Rio Grande de Loiza in Puerto Rico.

CONSTRUCTION

The President's Budget Request Program includes $97.3 million for our construction program. This amount, together with $30.1 million of unobligated programmed carryover funds from fiscal year 1995 will allow the initiation of new projects and is adequate to maintain current construction schedules on continuing projects. Over the past few years, we have been unable to execute up to the full amount programmed, resulting in unused funds. Consequently, we have revised our schedules and reduced the funding program to reflect this trend and to reduce carryover funds.

MAJOR REHABILITATION

New construction starts will allow for the rehabilitation of power units at three hydropower facilities that have experienced deterioration, increased maintenance, and shutdowns.

BAYOU LA BATRE, ALABAMA

Construction will continue on channel improvements at the Bayou La Batre in Alabama to allow navigation by deeper draft vessels.

MIAMI HARBOR, FLORIDA

The local sponsor is continuing construction to provide a 44-foot channel in Miami Harbor, Florida. The requested funds will allow for construction monitoring and support.

PASCAGOULA HARBOR, MISSISSIPPI

At Pascagoula Harbor in Mississippi, the requested funds will allow completion of the initial phase to widen and deepen the channels to support shipbuilding and general cargo shipping.

FORT FISHER AND VICINITY, NORTH CAROLINA

In North Carolina, we will complete construction of a 3,040 foot long rubble mound revetment to protect the Fort Fisher historic battlefield site from beach erosion.

MYRTLE BEACH, SOUTH CAROLINA

Construction will continue to place sand on about 25 miles of Myrtle Beach, South Carolina, to protect development from storm damage.

CENTRAL AND SOUTHERN FLORIA, FLORIDA

The Central and South Florida project encompasses the southerly 18 counties of the State. The requested funds will allow continuing construction on the facilities in the Upper St. Johns River portion of the project and the South Dade County Canal, C–111, to continue planning and design of the project review study, and canal enlargement and structure modifications for the West Palm Beach Canal, C–51, as well as other activities specifically directed by the Congress.

PORTUGUES AND BUCANA RIVERS, PUERTO RICO

The Portugues and Bucana Rivers project provides flood protection for Ponce, Puerto Rico, through the construction of two high level dams and channel improvements. Construction of the concrete arched Portugues Dam is now under way.

RIO PUERTO NUEVO, PUERTO RICO

At Rio Puerto Nuevo, lands will be acquired and construction initiated this year on this flood control project in metropolitan San Juan, Puerto Rico.

KISSIMMEE RIVER, FLORIDA

Unobligated carryover funds from prior years will be used to modify the Kissimmee River flood control project in Florida. We will fill part of the canal, thereby restoring much of the river to a naturally meandering system, resulting in the improvement of environmental conditions.

OPERATION AND MAINTENANCE

The largest category of our fiscal year 1996 Budget Request is for operation and maintenance. We are requesting $280.3 million to ensure that completed projects fulfill their authorized purposes.

NAVIGATION PROJECTS

Our request includes $176.3 million for navigation, which allows us to maintain 29 major harbors and channel projects. And along with the harbors, our 3,800 miles of inland waterways with 33 locks and dams which are vital to waterborne commerce, both foreign and domestic.

FLOOD CONTROL PROJECTS

Flood control projects account for $17.2 million of our request. These projects have prevented flood damages valued in excess of $1 billion over the past 50 years.

MULTIPLE PURPOSE PROJECTS

The 13 multiple purpose projects which we operate and maintain account for $82.2 million of our request. These projects provide a variety of benefits, including hydropower production. Last year, they generated 4.2 million megawatt hours of power resulting in power sales of $90.4 million.

PROTECTION OF NAVIGATION

Protecting navigation on our waterways is vital to the economic well being of our Nation. We are requesting $4.6 million for this purpose, which includes project condition surveys and the removal of aquatic growth.

CONCLUSION

The South Atlantic Division continues, with the support of this committee, to have an important and active Civil Works program for the public in the southeastern United States. Located in the

Olympic City of Atlanta, we believe that we are well positioned to continue the tradition of engineering excellence in the service of the citizens of this great region. Mr. Chairman, that concludes my status report for this year. I will be happy to answer your questions.

Mr. MYERS. Thank you, General.

[The statement of General Locurcio follows:]

STATUS REPORT ON THE CIVIL WORKS ACTIVITIES
IN THE SOUTH ATLANTIC DIVISION
FISCAL YEAR 1996
BRIGADIER GENERAL RALPH V. LOCURCIO

INTRODUCTION

Mr. Chairman, and distinguished members of the Committee, I am pleased to appear before you again, this time to report on the Civil Works activities in the South Atlantic Division. Assisting me are Mr. Bill Osborne and Mr. Brian Tarras of my Civil Programs Division. Also with me is Mr. John Rushing, Director of Programs Management.

DIVISION AREA

The South Atlantic Division is responsible for the Civil Works activities in all or part of seven southeastern states, Puerto Rico and the Virgin Islands. The area covers about 260,000 square miles and includes about 13 percent of the national population.

FISCAL YEAR 1994
SMALL DISADVANTAGED BUSINESS

During Fiscal Year 1994, the Division exceeded the goals for contract awards to Small Disadvantaged Business concerns with direct contracts valued in excess of $128 million and subcontracts valued over $12 million.

FISCAL YEAR 1995
COMPLETIONS

Before I mention the President's Fiscal Year 1996 Budget request, I would like to highlight some activities that will be completed with funds previously provided. These include correction of downstream problems at the William Bacon Oliver Lock in Alabama; construction to by-pass sand across the entrance as well as deepening the channels at Canaveral Harbor, Florida; removing rock from the Wilmington Harbor, North Carolina entrance channel; deepening the Gulfport Harbor, Mississippi channels; and raising the spillway and dam at the Falls Lake, North Carolina project.

OVERALL BUDGET

The President's Fiscal Year 1996 Budget request includes $386,422,000 for Civil Works activities in the South Atlantic Division. This amount, together with $30,133,000 of unobligated programmed carryover funds from Fiscal Year 1995, results in a total program of $416,555,000 for Fiscal Year 1996. I will highlight some of our progress and planned activities.

GENERAL INVESTIGATIONS

The General Investigations request of $8,855,000 will allow for the planning, evaluation, engineering and design of solutions to water resource problems throughout the region.

SURVEYS - NEW

NAVIGATION

A new study will address navigation problems at Georgetown Harbor, South Carolina.

FLOOD DAMAGE PROTECTION

New studies will address flood damage protection measures for the watershed in downtown Atlanta, Georgia, and along the Waccamaw River in South Carolina.

COMPREHENSIVE

A comprehensive basin review of the Santee, Cooper, and Congaree River system in South Carolina will be initiated.

REVIEW OF COMPLETED PROJECTS

New studies will determine the disposition of the New Savannah Bluff Lock and Dam project in Georgia; modifications to allow abandonment of the Island Creek dam and pump station at the John H. Kerr Dam and Reservoir project in Virginia; and whether the authorized plan of improvement remains justified at the Crown Bay Harbor project in the Virgin Islands.

SURVEYS - CONTINUING

NAVIGATION

We are continuing navigation studies to improve the Alabama River channel below Claiborne Lock and Dam to support barge traffic; deepen the main ship channel in Jacksonville Harbor to accommodate larger vessels now being used in the world fleet; stabilize the Ponce de Leon Inlet channel for the commercial fishing fleet in Florida; deepen the Brunswick Harbor, Georgia project to support bulk and container vessels; extend the Savannah Harbor, Georgia project to a new container port; widen and deepen the Cape Fear-Northeast Cape Fear Rivers to accommodate Panamax vessels in North Carolina; and improve Charleston Harbor, South Carolina for larger container and bulk cargo ships.

FLOOD DAMAGE PREVENTION

We are conducting flood prevention studies for existing and new projects along the entire coastline of Florida, and residential and commercial developments in Hancock, Harrison, and Jackson Counties in Mississippi.

PRECONSTRUCTION ENGINEERING AND DESIGN

NAVIGATION

We will continue Preconstruction Engineering and Design efforts for navigation improvements, including the Hillsboro Inlet project, deepening the navigation channels in Panama City Harbor, improving and stabilizing the St. Lucie Inlet in Florida; and widening the main ship channel in Wilmington Harbor, North Carolina.

FLOOD CONTROL

We will continue design on flood control measures for the shorefront development of the Brunswick County beaches in North Carolina, and for many towns along the Arecibo River and Rio Grande de Loiza in Puerto Rico.

CONSTRUCTION

The President's budget request includes $97,261,000 for our construction program. This amount, together with $30,133,000 of unobligated programmed carryover funds from Fiscal Year 1995, results in a total of $127,394,000 for our construction program. These funds will allow the initiation of new projects and are adequate to maintain current construction schedules on continuing projects. Over the past few years, we have not been able to execute up to the full amount programmed, resulting in unused funds. Consequently, our schedules have been revised and the funding program reduced to reflect this trend and to reduce the carryover of funds.

NEW MAJOR REHABILITATION

New construction starts will allow for the rehabilitation of the power units at three hydropower facilities that have experienced deterioration, increased maintenance, and shutdowns.

CONTINUING

NAVIGATION

BAYOU LA BATRE, ALABAMA

Construction will continue on channel improvements at Bayou La Batre, Alabama that will allow navigation by deeper draft vessels.

MIAMI HARBOR CHANNEL, FLORIDA

The local sponsor is continuing construction to provide a 44 foot channel in Miami Harbor, Florida. The requested funds will allow for construction monitoring and support.

PASCAGOULA HARBOR, MISSISSIPPI

At Pascagoula Harbor, Mississippi, the requested funds will allow completion of the initial phase to widen and deepen the channels to support ship building and general cargo shipping.

BEACH EROSION CONTROL

FORT FISHER AND VICINITY, NORTH CAROLINA

In North Carolina, we will complete construction of a 3,040 foot long rubble mound revetment to protect the Fort Fisher historic battlefield site from beach erosion and hurricanes.

MYRTLE BEACH, SOUTH CAROLINA

Construction will continue to place sand on about 25 miles of Myrtle Beach, South Carolina to protect development from storm damage.

FLOOD CONTROL

CENTRAL AND SOUTHERN FLORIDA, FLORIDA

The Central and Southern Florida project encompasses the southerly 18 counties of the state. The requested funds will allow continuing construction on the facilities in the Upper St Johns portion of the project and the South Dade County Canal (C-111); continued planning and design for the project Review Study, and canal enlargement and structure modification for West Palm Beach Canal (C-51); as well as other activities specifically directed by the Congress.

PORTUGUES AND BUCANA RIVERS, PUERTO RICO

The Portugues and Bucana Rivers project provides flood protection to Ponce, Puerto Rico through the construction of two high level dams and channel improvements. Construction of the concrete arched Portugues Dam is now underway.

RIO PUERTO NUEVO, PUERTO RICO

At Rio Puerto Nuevo, lands will be acquired and construction initiated this year on this flood control project in metropolitan San Juan, Puerto Rico.

ENVIRONMENT
KISSIMMEE RIVER, FLORIDA

Unobligated carryover funds from prior years will be used to modify the Kissimmee River, Florida flood control facilities and fill a part of the canal to restore much of the river to its natural meandering system, resulting in the improvement of environmental conditions.

OPERATION AND MAINTENANCE

The largest category of our Fiscal Year 1996 Budget request is for operation and maintenance. We are requesting $280,306,000 to insure that completed projects fulfill their authorized purposes.

NAVIGATION PROJECTS

Our request includes $176,271,000 for navigation, which allows us to maintain 29 major harbors and other small harbor and channel projects. Along with the harbors, our 3,800 miles of inland waterways with 33 locks and dams are vital to waterborne commerce, both foreign and domestic.

FLOOD CONTROL PROJECTS

Flood control projects account for $17,214,000 of our request. These projects have prevented flood damages valued in excess of $1 billion over the past 50 years.

MULTIPLE PURPOSE PROJECTS

The 13 Multiple purpose projects which we operate and maintain account for $82,179,000 of our operation and maintenance request. These projects provide a variety of benefits, including hydropower production. They generated 4.2 million megawatt hours of power last year resulting in sales revenues of $90.4 million.

PROTECTION OF NAVIGATION

Protecting navigation on our waterways is vital to the economic well-being of the nation. We are requesting $4,642,000 for this purpose which includes project condition surveys and the removal of aquatic growth.

CONCLUSION

The South Atlantic Division continues, with your support, to have an important and active Civil Works program for the public in the southeastern United States. Located in the Olympic City of Atlanta, we believe that we are well positioned, with demonstrated ability, to continue the tradition of engineering excellence in the service of the citizens of this great region. Mr. Chairman, that concludes my status report for this year. I would be happy to answer your questions.

[CLERK'S NOTE.—The justification sheets for the South Atlantic Division follow:]

Justification of Estimates for Civil Function Activities
Department of the Army, Fiscal Year 1996
SOUTH ATLANTIC DIVISION

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Justification of Estimates for Civil Functions Activities
Department of the Army, Corps of Engineers
Fiscal Year 1996

SUMMARY SOUTH ATLANTIC DIVISION

	FY 1995 Allocation 1/	FY 1996 Request	Increase or Decrease
General Investigations			
Surveys	$ 3,940,000	$ 5,401,000	$ +1,461,000
Preconstruction Engineering and Design	4,711,000	3,454,000	-1,257,000
Subtotal General Investigations	(8,651,000)	(8,855,000)	(204,000)
Construction, General			
Construction	116,108,000	93,061,000	-23,047,000
Major Rehabilitation	0	4,200,000	+4,200,000
Dam Safety Assurance	0	0	0
Subtotal Construction, General	(116,108,000)	(97,261,000)	(-18,847,000)
Operation and Maintenance, General			
Project Operation	82,401,000	81,673,000	-728,000
Project Maintenance	174,861,000	198,633,000	+23,772,000
Subtotal Operation and Maintenance	(257,262,000)	(280,306,000)	(+23,044,000)
GRAND TOTAL, SOUTH ATLANTIC DIVISION	$ 382,021,000	$ 386,422,000	$ +4,401,000

1/ Energy and Water Development Appropriation Act, 1995, P.L. 103-316 (108 stat. 1707).

Study/Project	Total Estimated Federal Cost $	Allocation Prior to FY 1995 $	Allocation FY 1995 $	Tentative Allocation FY 1996 $	Additional to Complete After FY 1996 $
1. SURVEYS - NEW					
a. Navigation Studies.					
South Carolina					
Georgetown Harbor	397,000	0	0	300,000	97,000

Georgetown Harbor is located at the head of Winyah Bay near the mouths of the Sampit, Pee Dee and Waccamaw Rivers, approximately 60 miles northeast of Charleston, South Carolina. The existing project provides for a channel 27 feet deep from the Atlantic Ocean through Winyah Bay and includes a turning basin in Sampit River. Since 1984 approximately $8.5 million has been spent on structures and improvements by the South Carolina State Ports Authority (SCSPA) and private interests. This work includes a 43,000 square foot warehouse, 700-foot bulkhead, salt dome, cement dome, three lumber sheds, plus acquisition of ten additional acres of land. As a result of these efforts, commerce has increased from 249,000 tons in 1984 to over 1.1 million tons in 1993. The majority of the vessels currently using Georgetown Harbor cannot navigate the channel fully loaded. The major problems encountered at Georgetown are: 1) lack of year-round project depth caused by rapid shoaling of the area, 2) turning basins, turns, and channel dimensions are insufficient for existing traffic, and 3) lack of adequate disposal sites. This study will investigate the feasibility of modifying the existing project; develop a maintenance plan which will provide authorized depth year round, with or without project modification, and a disposal plan which is economically and environmentally acceptable. The South Carolina State Ports Authority is the potential non-Federal partner and is aware of the study cost sharing requirements. Fiscal Year 1996 funds will be used to initiate the reconnaissance study to include economic studies, tidal hydraulics, sediment movement, quantity estimates, and environmental studies. The reconnaissance study is scheduled to be completed in December 1996, which is 12 months after initiating the study.

Study/Project	Total Estimated Federal Cost $	Allocation Prior to FY 1995 $	Allocation FY 1995 $	Tentative Allocation FY 1996 $	Additional to Complete After FY 1996 $
b. Flood Damage Prevention Studies.					
Georgia					
Atlanta Watershed	600,000	0	0	350,000	250,000

The study will be conducted for the purpose of developing a comprehensive watershed master plan for parts of metropolitan Atlanta. The development of the master plan will be based on a thorough assessment of flooding problems and flood damage reduction needs, water quality problems and needs, and inter-related storm drainage and sanitary sewer environmental infrastructure problems and needs. DeKalb County and Fulton County, Georgia and the City of Atlanta have passed floodplain regulations, resolutions, or ordinances to restrict development in flood-prone areas; however, the rapid urbanization of the Atlanta metropolitan area resulted in the development of many areas subject to periodic flooding prior to passage of these regulations, resolutions, or ordinances. The scarcity of land and attractiveness of stream side areas both contributed to encroachment on the floodplain. Local drainage patterns have also been greatly altered by the urbanization of the metropolitan area. At many locations, extensive storm drain systems have been used to substantially alter natural drainage patterns in order to get rid of water as quickly as possible. Much of the water entering the streams comes from runoff from developed areas, plant discharges, pipe leaks, and numerous other sources. Thus, the water tends to be of poor quality often loaded with oils, grease, and other pollutants. Additional pollution is caused by treated and untreated wastes from industrial sources, by wastes picked up and carried into the streams by urban street runoff during rains, and by leakage and overflow from combined storm and sanitary sewers during rains. Major flood events occurred in April 1963, March 1975, March 1976, and March 1990. There are over 600 residential structures in the 100-year flood plain. Funds requested for Fiscal Year 1996 will be used to initiate reconnaissance phase studies, including engineering, economic, and environmental investigations to identify potential alternatives that would alleviate flood damage, water quality, and inter-related storm drainage problems. Potential sponsors include the State of Georgia, Fulton County, Dekalb County, and the City of Atlanta. The reconnaissance report is scheduled for completion in January 1997, which is 12 months after initiation of the study.

Study/Project	Total Estimated Federal Cost $	Allocation Prior to FY 1995 $	Allocation FY 1995 $	Tentative Allocation FY 1996 $	Additional to Complete After FY 1996 $
South Carolina					
Waccamaw River	385,000	0	0	300,000	85,000

The Waccamaw River is located entirely in the coastal plain of North Carolina and South Carolina and has a drainage area of approximately 1,530 square miles. Flooding has occurred throughout the basin resulting in the construction of ten Corps small flood control projects over the past 40 years. The most recent flooding occurred in January of 1993 when the Waccamaw crested at 9.1 feet, which is 2.1 feet over flood stage. Homes were completely surrounded by water and approximately two miles of the road leading to the homes were impassable by vehicle. Annual flood damages are estimated at $800,000. Future development will be primarily between the Atlantic Intracoastal Waterway (AIWW) and the Waccamaw River. As development progresses in the eastern portion of the basin, flood problems will intensify in the cities of Myrtle Beach and North Myrtle Beach, the primary growth areas. Continued growth and flooding in the area warrant investigation and resolution of the flood problems as early as possible. The City of Myrtle Beach is the potential local sponsor and has indicated a willingness to share study costs. The reconnaissance investigations will document the extent to which flood problems exist, identify possible Federal projects within the basin with particular attention on flood control within Horry County, and will address other water resource needs that may be identified. The Waccamaw River Basin supports a number of species of plants and animals which are on the threatened or endangered species list. This study will also investigate opportunities to restore fish and wildlife habitat. Fiscal Year 1996 funds will be used to initiate the reconnaissance study to include economic studies, hydraulics and hydrology, quantity estimates, and environmental studies. The reconnaissance study is scheduled to be completed in December 1996, which is 12 months after initiating the study.

Study/Project	Total Estimated Federal Cost $	Allocation Prior to FY 1995 $	Allocation FY 1995 $	Tentative Allocation FY 1996 $	Additional to Complete After FY 1996 $
c. Comprehensive Basin Studies.					
South Carolina					
Santee, Cooper and Congaree Rivers	400,000	0	0	300,000	100,000

The Santee-Cooper River Basin includes 16 counties in South Carolina and portions of western North Carolina. The total drainage area of the basin is over 15,000 square miles, which encompasses 33 percent of South Carolina's total land area and over 60 percent of the State's population. Significant growth in population and industry has increased flooding and environmental concerns. Flooding continues in the Columbia metropolitan area. Flood stage has been exceeded 36 times in Columbia, West Columbia, and Cayce over the last 53 years. These areas are particularly vulnerable to hurricanes and tropical storms. Landowners also continue to be damaged by flooding in the lower Santee area. In the lower basin, there is a continuing concern for saltwater intrusion of the Bushy Park Reservoir, a primary source of industrial and domestic water supply. The reservoir is vulnerable to damage from saltwater during a storm surge or severe drought. Approximately 700 acres of wetlands were degraded by the Cooper River Rediversion Project completed in 1985. There is also a growing concern for the outmigration of the juvenile anadromous fish. A wide variety of other problems and opportunities need to be examined through a carefully coordinated comprehensive study. These include municipal and industrial water supply, recreation, and fish and wildlife enhancement. The reconnaissance study will identify and document the extent of the various problems and their interrelationships. A particular opportunity exists for environmental restoration.

Many Federal and State agencies have expressed strong interest in this study. The potential cost sharing sponsors are the South Carolina Department of Natural Resources and the South Carolina Public Service Authority. They are aware of the study cost sharing requirements. Fiscal Year 1996 funds will be used to initiate the reconnaissance study, including economic, hydraulic and hydrology, and environmental studies. The reconnaissance study will be unusually complex and will require extensive coordination. The reconnaissance study will require eighteen months, with completion scheduled for June 1997.

Study/Project	Total Estimated Federal Cost $	Allocation Prior to FY 1995 $	Allocation FY 1995 $	Tentative Allocation FY 1996 $	Additional to Complete After FY 1996 $
d. Project Review Studies.					
Georgia					
New Savannah Bluff Lock & Dam	320,000	0	0	130,000	190,000

The New Savannah Bluff Lock and Dam (NSBL&D), completed in 1937, is located 187 miles above the mouth of the Savannah River, approximately 13 miles downstream from Augusta, Georgia. While the project is designed to aid navigation, the 52 acre reservation is also the location of recreational facilities. In 1972, an inspection indicated that the dam's piers have numerous cracks in them, a condition potentially detrimental to their structural integrity. Since the project no longer serves the purpose for which it was originally authorized and built (commercial navigation ceased in 1981), we have curtailed major operation and maintenance expenditures for the project. Although the project is no longer serving its authorized purpose, it is serving other useful purposes such as reregulating flows to benefit water supply and recreation. Currently, the lock facility is leased to the City of Augusta. The lock and dam's water supply function includes maintenance of a more even river flow and sufficient water level by reregulation of the daily pulse of water released from J. Strom Thurmond Dam and the Stevens Creek Dam during hours of peak power production. A number of industrial water intakes both upstream and downstream of the lock and dam are dependent on a steady, sufficient flow and water depth for proper operation. There are approximately 10 large industrial firms and municipalities that withdraw water from the Savannah River between Stevens Creek and the lock and dam. The lock and dam structure presents an obstacle to migration of certain anadromous fish in the Savannah River during their spawning. Large numbers of American shad, blueback herring, striped bass, and sturgeon migrate to the lock and dam each year. The Savannah River in the vicinity of the lock and dam is heavily used by recreational boaters, including annual boating events (races and regattas) above the lock and dam. The maintenance of sufficient depth for these recreational uses is dependent on the proper function and operation of the lock and dam. The study would investigate appropriate project purposes such as water supply, fish and wildlife restoration, and recreation to determine either the Federal interest for continuing operation and maintenance or turn the project over to another entity. We have received a letter dated 23 April 1993 from the city of Augusta, Georgia, indicating their interest in studies to turn over the structure to them.

An Initial Appraisal has been conducted. Full Federal funding is proposed for this study since the main purpose of the study is the disposal of a Federal facility. The study is scheduled for completion in September 1997.

Study/Project	Total Estimated Federal Cost $	Allocation Prior to FY 1995 $	Allocation FY 1995 $	Tentative Allocation FY 1996 $	Additional to Complete After FY 1996 $
Virginia					
John H. Kerr Dam and Lake	400,000	0	0	350,000	50,000

John H. Kerr Reservoir is located in the Roanoke River basin and extends into north-central North Carolina and south-central Virginia. Kerr reservoir, including the Island Creek dam and pumping station, was completed in 1952. The main thrust of the Section 216 study will be on the Island Creek dam and pumping station. The purpose of the Island Creek facility, constructed across an arm of Kerr Reservoir, was to protect a nearby tungsten mine from groundwater intrusion. Runoff from the Island Creek watershed is collected in Island Creek reservoir, and pumped through Island Creek dam into Kerr reservoir. However, the facility no longer serves its intended purpose, since the tungsten mine has been inactive for approximately 20 years. No interest in reactivation of mining operations has been identified. Abandonment of the Island Creek facility appears to be in the Federal interest for the following reasons: (1) Substantial economic and energy resources are required for its operation; (2) Abandonment of the facility would increase storage and surface area available at Kerr reservoir; (3) Replacement of mechanical components will be necessary if the facility continues to operate; and (4) The Island Creek facility is now a public safety hazard due to the encroachment of residential development into the area which would be inundated if a pumping failure occurred. Abandonment of the facility will consist of cessation of pumping operations and opening of the conduit to Kerr Reservoir, along with minor modifications to Island Creek dam. Island creek reservoir would then rise to the elevation of Kerr Lake, increasing the surface area of Island Creek Reservoir from approximately 180 acres to approximately 2,300 acres. Resource management problems which must be addressed prior to abandonment of the facility include: (1) Potentially hazardous substance sites in the Island Creek watershed; (2) Adverse social impacts, including acquisition of private property rights and displacement of residents; (3) Wetland and wildlife habitat losses due to inundation; and (4) Potential impacts on cultural resources. Prior to abandonment of the facility, environmental restoration and mitigation measures will be developed to offset these impacts.

The only alternative to abandonment of the Island Creek pumping station is continued Federal operation, maintenance, and rehabilitation of the facility. Average annual costs for continued operation, maintenance, and rehabilitation are estimated at $525,000. This alternative will result in preservation of existing vegetation and wildlife resources. Due to the presence of Kerr Reservoir, Island Creek has no outlet other than the pumping station; therefore, essentially continuous and perpetual pumping will be required to prevent inundation of the Island Creek subimpoundment.

APPROPRIATION TITLE: General Investigations, Fiscal Year 1996 South Atlantic Division

Study/Project	Total Estimated Federal Cost $	Allocation Prior to FY 1995 $	Allocation FY 1995 $	Tentative Allocation FY 1996 $	Additional to Complete After FY 1996 $

The US Fish and Wildlife Service supports this study effort, as does the State of North Carolina (Island Creek dam and pumping station are located in Virginia; however, the area which would be inundated by abandonment of this facility is primarily in North Carolina). The State of Virginia has no objection to the study and considers Island Creek to be primarily a North Carolina problem.

Full Federal funding is proposed for the study since the main purpose of this study will be the abandonment of a Federal facility and the removal of the need for continued Federal operation and maintenance. The reconnaissance study is scheduled to be completed in December 1996, which is 12 months after initiating the study.

Study/Project	Total Estimated Federal Cost $	Allocation Prior to FY 1995 $	Allocation FY 1995 $	Tentative Allocation FY 1996 $	Additional to Complete After FY 1996 $
Virgin Islands					
Crown Bay Channel	170,000	0	0	150,000	20,000

Crown Bay is on the south coast of St Thomas Island in the Virgin Islands about 75 miles east of San Juan, Puerto Rico. Port facilities on the shore of Crown Bay handle commercial cargo which is mainly containerized imports as well as some break-bulk movements. A feasibility report, completed in FY 1980, recommended a navigation project with an estimated cost of $8.29 million for construction of a channel and turning basin to a depth of 36 feet. The average annual equivalent benefits were $847,000 from passenger ship operational savings, passenger benefits and land enhancement. Since that report, the Virgin Islands Port Authority has changed their port operations and now has commercial cargo facilities in the area previously designated to handle passenger ships. Most passenger ships now use the West India Company dock in St Thomas Harbor on the east side of Crown Bay. The Port Authority did dredge in the authorized project area for material to develop the land where the cargo facilities now exists. The area developed by the Port was the original disposal area for the project. From 1986 through 1989 cargo tonnage has averaged about 460,000 tons a year for St Thomas Harbor in the Virgin Islands.

The Water Resources Development Act of 1986 authorized construction of the project. The Virgin Islands Port Authority, the local sponsor, wants the Federal project for container ships using the Crown Bay port facilities. With the local sponsor dredging for fill material, the cost of the project would be less than originally estimated for construction. The Port Authority seeks no reimbursement for local dredging in the project area. A reconnaissance study is needed to determine if the authorized project remains justified and meets current day needs. If so, the next step would be a preconstruction engineering and design (PED) resumption.

Fiscal Year 1996 funds will be used to initiate the reconnaissance study. The reconnaissance study is scheduled for completion in December 1996, which is 12 months after initiating the study.

Study/Project	Total Estimated Federal Cost $	Allocation Prior to FY 1995 $	Allocation FY 1995 $	Tentative Allocation FY 1996 $	Additional to Complete After FY 1996 $
2. SURVEYS - CONTINUING					
a. Navigation Studies.					
Alabama					
Alabama River below Claiborne Lock & Dam	2,406,000	0	168,000	238,000	2,000,000

The ongoing Comprehensive Study of the Apalachicola-Chattahoochee-Flint (ACF) and Alabama-Coosa-Tallapoosa (ACT) River Basins is addressing a wide variety of water resources issues and seeks balanced use, development and protection of water resources in the two interstate basins. The ACF Basin drains an area of 19,600 square miles in Georgia, Alabama, and Florida and the ACT Basin drains an area of 22,800 square miles in Georgia and Alabama. The Comprehensive Study will identify water resources problems in the basins and some potential solutions that will require Congressional authorization. Such solutions, which are subject to consensus of the three state partners in the ongoing Comprehensive Study may include additional locks and dams for navigation, changes in reservoir operations, or reallocation of storage to support additional project purposes. One concern being addressed in the Comprehensive Study is the reliability of the authorized 9-foot navigation project in the Alabama River below Claiborne Lock and Dam. Dredging and training works have been used extensively to increase the reliability of the channel, but these actions have had only limited success, due to recurring shoaling and streambed degradation following annual high flow periods. The primary products transported on this commercial inland navigation channel are forest products, sand and gravel, and petroleum products.

FY 1995 funds are being used to initiate the reconnaissance study at full Federal expense. Funds requested for FY 1996 will be used to complete reconnaissance phase investigations. Since the project is an inland waterway, the feasibility study will be 100 percent Federally funded and no local sponsor is required.

The reconnaissance phase is scheduled to be completed in July 1996. A completion date is being determined for this feasibility study.

Study/Project	Total Estimated Federal Cost $	Allocation Prior to FY 1995 $	Allocation FY 1995 $	Tentative Allocation FY 1996 $	Additional to Complete After FY 1996 $
Florida					
Jacksonville Harbor	1,308,000	236,000	210,000	414,000	448,000

Jacksonville Harbor is at the mouth of the St. Johns River where it empties into the Atlantic Ocean in Duval County on the east coast of Florida. Jacksonville, which includes all of Duval County, is the largest urban complex in northeast Florida and southeast Georgia. The existing 26.8 mile long navigation project contains the following features: an entrance channel with 42 and 40-foot depths, jetties at the entrance channel, a 38-foot channel from the ocean entrance channel to mile 20, with widths ranging between 400 and 1200 feet, a 30-foot channel from Commodore Point to the Florida East Coast Railway bridge at Jacksonville, and a 30-foot channel in Arlington Cut and in the old Dame Point-Fulton Channel. Jacksonville Harbor in 1988 and 1989 averaged about 15.4 million tons of cargo per year, 53 percent of which is bulk petroleum and coal. Port Authority representatives would like the channel deepened to accommodate larger vessels now being utilized by the world's commercial fleet. Various types of vessels carrying containers, coal, and fuel must light load instead of using full cargo carrying capacity. This study will address the feasibility of deepening the existing harbor channel to include the impact of material removal on the harbor system and shoreline process. Hydraulic modeling is included to evaluate widening for the larger ships. The Jacksonville Harbor Port Authority is the non-Federal sponsor. The feasibility cost sharing agreement was executed in August 1994.

Fiscal Year 1995 funds will be used to continue the feasibility phase. The preliminary estimated cost of the feasibility phase is $2,266,000, which is to be shared on a 50-50 percent basis by the Federal and non-Federal interests. Up to one half of the non-Federal share may be in-kind services. A summary of study cost sharing is as follows:

Total Estimated Study Cost	$2,441,000
Reconnaissance Phase (Federal)	175,000
Feasibility Phase (Federal)	1,133,000
Feasibility Phase (Non-Federal)	1,133,000

The reconnaissance phase was completed in August 1994. A completion date is being determined for this feasibility study.

Study/Project	Total Estimated Federal Cost $	Allocation Prior to FY 1995 $	Allocation FY 1995 $	Tentative Allocation FY 1996 $	Additional to Complete After FY 1996 $
Ponce De Leon Inlet	941,000	327,000	247,000	233,000	134,000

Ponce de Leon Inlet is in Volusia County on the east coast of Florida about 65 miles south of St. Augustine Harbor and 57 miles north of Canaveral Harbor. The inlet is a natural waterway connecting the Atlantic Ocean with the Halifax and Indian Rivers. There is an existing navigation project in the inlet that provides channels 15 feet deep by 200 feet wide in the ocean, 12 feet deep by 200 feet wide in the inlet, 12 feet deep by 100 feet wide in the Indian River section connecting with the Intracoastal Waterway to the south, and 7 feet deep by 100 feet wide in the Halifax River section connecting with the Intracoastal Waterway to the north. Jetties on each side of the inlet are also part of the project. Although navigation has improved with the construction of the jetties, there are still safety problems that are causing groundings and loss of life. Coast Guard records for the period 1980-1991 document 347 vessel groundings, 109 vessels that capsized, and 20 lives lost in the vicinity of the inlet. Frequent maintenance is also required with an average annual cost of approximately $1,000,000. Use of the inlet includes commercial fishing and charter boats which are adversely affected with changing inlet conditions. The study will focus on stabilizing the inlet to reduce navigation problems and maintenance costs. The Ponce de Leon Port Authority is the non-Federal sponsor. The feasibility cost sharing agreement was executed in February 1994.

Fiscal Year 1995 are being used to continue the feasibility phase. Requested funds will be used to continue model study and economic work. The estimated cost of the feasibility phase is $1,532,000, which is to be shared on a 50-50 percent basis by the Federal and non-Federal interests. Up to one half of the non-Federal share may be in-kind services. A summary of study cost sharing is as follows:

Total Estimated Study Cost	$1,707,000
Reconnaissance Phase (Federal)	175,000
Feasibility Phase (Federal)	766,000
Feasibility Phase (Non-Federal)	766,000

The reconnaissance phase was completed in February 1994. The feasibility study is scheduled for completion in November 1997.

Study/Project	Total Estimated Federal Cost $	Allocation Prior to FY 1995 $	Allocation FY 1995 $	Tentative Allocation FY 1996 $	Additional to Complete After FY 1996 $
Georgia					
Brunswick Harbor	2,477,000	1,752,000	94,000	300,000	331,000

The Brunswick Harbor Study was resumed in FY 1995 as a cost-shared feasibility study. Woodpulp exports through the port continue to be limited by insufficient channel depth. The Feasibility Report will likely recommend deepening the existing Federal navigation project. At the time of study suspension, a 2-foot deepening project was identified as the NED Plan costing $45,000,000. A 4-foot deepening plan estimated to cost $78,000,000 was identified as the Locally Preferred Plan. The Georgia Ports Authority (GPA) requested that the study be suspended until economic evaluations could support 4-foot deepening. Believing there has been sufficient economic change to support the Locally Preferred Plan, GPA requested a resumption of the study. Channel deepening would occur on the inner harbor channels to terminal facilities on the East River. Remaining feasibility activities include refining design parameters, updating the benefit and cost evaluations, and completing the Environmental Impact Statement. The project sponsor is the Georgia Ports Authority, who has expressed a willingness to cost-share the remaining portion of the study. The Feasibility Cost Share Agreement is scheduled to be executed in March 1995.

Fiscal Year 1995 funds are being used to resume the feasibility phase. Prior to Fiscal Year 1995 the feasibility study was funded at total Federal expense. Funds requested for Fiscal Year 1996 will be used to continue the feasibility phase of the study. The preliminary estimated cost of the feasibility phase is $3,052,000. The estimated cost to resume and complete the study is $1,450,000 which is to be shared on a 50-50 percent basis by Federal and non-Federal interests. Up to one-half of the non-Federal share may be in-kind services. A summary of study cost sharing is as follows:

Total Estimated Study Cost	$ 3,202,000
Reconnaissance Phase (Federal)	150,000
Feasibility Phase (Federal)	2,327,000
Feasibility Phase (Non-Federal)	725,000

A completion date is being determined for this feasibility study.

Study/Project	Total Estimated Federal Cost $	Allocation Prior to FY 1995 $	Allocation FY 1995 $	Tentative Allocation FY 1996 $	Additional to Complete After FY 1996 $
Lower Savannah River Basin	665,000	474,000	166,000	25,000	0

The Lower Savannah River Basin includes the Savannah River and surrounding wetlands from the start of the Savannah River Below Augusta Project which begins at the upper end of the Savannah Harbor (mile 21.31) to the head of navigation at Augusta just above the 13th Street bridge (mile 202.16), a distance of 180.85 miles. The primary focus of the reconnaissance study was to determine the advisability of the environmental restoration of the Lower Savannah River Basin and surrounding wetlands to restore fish and wildlife habitat and water quality by increasing flow throughout some of the cutoff bends and oxbows. The results of the reconnaissance study supported additional Federal involvement in a feasibility phase study of environmental engineering initiatives at 12 locations along the Lower Savannah River and surrounding wetlands. An interim feasibility report is being prepared for the two highest priority areas, navigation cuts numbers 3 and 4. The sponsor for the interim study is the City of Savannah, Georgia. The Feasibility Cost Sharing Agreement was executed in May 1993.

Fiscal Year 1995 funds are being used to continue the feasibility phase of the interim study including engineering, economics and environmental studies and prepare and coordinate the draft feasibility report. The funds requested for Fiscal Year 1996 will be used to complete and prepare the final report. The preliminary estimated cost of the feasibility phase is $950,000, which is being shared on a 50-50 percent basis by Federal and non-Federal interests. Up to one-half of the non-Federal share may be in-kind services. A summary of study cost sharing is as follows:

Total Estimated Study Cost	$ 1,140,000
Reconnaissance Phase (Federal)	190,000
Feasibility Phase (Federal)	475,000
Feasibility Phase (non-Federal)	475,000

The reconnaissance phase was completed in May 1993. The feasibility study is scheduled for completion in February 1996.

Study/Project	Total Estimated Federal Cost $	Allocation Prior to FY 1995 $	Allocation FY 1995 $	Tentative Allocation FY 1996 $	Additional to Complete After FY 1996 $
Savannah Harbor Extension	2,425,000	0	93,000	332,000	2,000,000

The Savannah Harbor area includes the lower 21.3 miles of the Savannah River which is the principal boundary between the states of Georgia and South Carolina. The City of Savannah is located about 18 miles from the river mouth. The Port of Savannah has and will continue to play an important role in the economic development of Georgia and South Carolina. Recent improvements to the harbor included construction of a new bridge in 1991, which increased vertical clearance to 185 feet, widening the channel from 400 to 500 feet in 1992 and deepening the harbor in 1994 to 42 feet, allowing access to 98% of all ships involved in international trade. Recent data compiled for the justification of the Harbor Deepening project and the South Atlantic Container Cargo Traffic Study indicate that 24 different major facilities or facility complexes serve the harbor. Results of the Container Study indicate the current 1.9 million tonnage equivalent units (TEU) through South Atlantic Ports is projected to exceed 13 million TEU by the year 2050; this volume is greater than today's total US containerized trade. With this growth the capacity of the Port of Savannah container cargo facilities is expected to be exceeded by 2005. The reconnaissance study will review the results of the Harbor Deepening Study, the Container Study, the Long Term Maintenance Strategy Study and will coordinate with the states and local interest groups to determine the Federal interest and need for further studies to expand the harbor for continued economic growth. The Georgia Ports Authority is the potential study sponsor and has indicated intent to cost share the feasibility study.

Fiscal Year 1995 funds are being used to initiate the reconnaissance study at full Federal expense. The funds requested for Fiscal Year 1996 will be used to complete the reconnaissance study and if the report is certified to be in accord with policy, initiate negotiations for the feasibility cost sharing agreement. The preliminary estimated cost of the feasibility phase is $4,000,000, which will be cost shared by Federal and non-Federal interests on a 50-50 percent basis. Up to one-half of the non-Federal share may be in-kind services. A summary of cost is as follows:

Total Estimated Study Cost	$ 4,425,000
Reconnaissance Phase (Federal)	425,000
Feasibility Phase (Federal)	2,000,000
Feasibility Phase (Non-Federal)	2,000,000

The reconnaissance phase is scheduled for completion in October 1996. A completion date is being determined for this feasibility study.

Study/Project	Total Estimated Federal Cost $	Allocation Prior to FY 1995 $	Allocation FY 1995 $	Tentative Allocation FY 1996 $	Additional to Complete After FY 1996 $
Mississippi					
Lowndes County Barge Fleeting Area	420,000	75,000	25,000	100,000	220,000

The study area is in northeast Mississippi on the Tennessee-Tombigbee Waterway (TTW) at Columbus. The problems to be investigated by this study consists of barge traffic congestion and potential safety hazards. The existing Federal channel at the port was designed for one-way traffic. Current practice is that typical barge configurations on the TTW must be separated before entering port, leaving barges tied to trees along the TTW. Barges which are loaded or unloaded in the port can only be taken through the port channel in a one or two barge tow. The 1993 traffic volume exceeded projected volume for the year 2036. As traffic continues to increase, potential safety hazards associated with movement of the traffic at the two Federal projects (TTW and Federal channel at the port) will also increase. The study will determine if potential safety hazards warrant Federal participation in construction of a barge fleeting area which will allow barges to be stored on a short term basis while waiting to be moved safely through a more congested Federal channel to a mooring location at the port. Cargo barged on the TTW in this area includes various chemicals, crushed limestone, gypsum rock, landscape timbers, steel, plywood, rolled wood pulp, rolled paper stock, and wood chips.

Fiscal Year 1995 funds are being used to complete the reconnaissance report at full Federal expense. If the report is certified to be in accord with policy, the funds requested for Fiscal Year 1996 will be used to continue into feasibility phase of the study, which will include engineering, cultural resource, economic, and environmental investigations. The preliminary estimated cost of the feasibility phase is $320,000, which is to be 100 percent Federally funded since this is an inland waterway project.

The reconnaissance phase is scheduled for completion in February 1996. A completion date is being determined for this feasibility study.

Study/Project	Total Estimated Federal Cost $	Allocation Prior to FY 1995 $	Allocation FY 1995 $	Tentative Allocation FY 1996 $	Additional to Complete After FY 1996 $
North Carolina					
Cape Fear - Northeast (Cape Fear) River	2,870,000	1,773,000	252,000	400,000	445,000

The study area consists of commercial navigation channels and extends from the Atlantic Ocean, through the ocean bar up to the North Carolina State Ports Authority terminal near the Cape Fear Memorial Bridge at Wilmington, a distance of 27 miles. From the Cape Fear Memorial Bridge, the study area extends up the Cape Fear River to Fayetteville, a distance of 111 miles, and up the Northeast (Cape Fear) River to Kornegays Bridge, a distance of 103 miles. Commercial navigation interests have requested several improvements to the projects near Wilmington and between the Atlantic Ocean and the North Carolina State Ports Authority terminal. The increasing size of ships operating in the harbor has stimulated interest in widening and deepening various parts of existing navigation projects. Major shipping companies and local and state interests are interested in deepening the main channel from the Atlantic Ocean to the North Carolina State Ports Authority terminal from 38 to at least 40 feet to fully accommodate Panamax vessels currently calling on the port and in deepening the existing channel upstream of the Cape Fear Memorial Bridge. Deeper channels would allow full loading of deep draft commercial ships and would result in significant savings in commercial navigation costs. The feasibility study cost-sharing agreement was signed in June 1992 with the study sponsor, the State of North Carolina.

Fiscal Year 1995 funds are being used to continue the feasibility phase of the study. The funds requested for Fiscal Year 1996 will be used to continue the feasibility phase. The estimated cost of the feasibility phase is $5,060,000 which is to be shared on a 50-50 basis by Federal and non-Federal interests. Up to one-half of the non-Federal share may be in-kind services. A summary of study cost sharing is as follows:

Total Estimated Study Cost	$5,400,000
Reconnaissance Phase (Federal)	340,000
Feasibility Phase (Federal)	2,530,000
Feasibility Phase (Non-Federal)	2,530,000

The reconnaissance phase was completed in June 1992. The feasibility study is scheduled for completion in December 1996.

APPROPRIATION TITLE: General Investigations, Fiscal Year 1996 South Atlantic Division

Study/Project	Total Estimated Federal Cost $	Allocation Prior to FY 1995 $	Allocation FY 1995 $	Tentative Allocation FY 1996 $	Additional to Complete After FY 1996 $
South Carolina					
Charleston Harbor (Deepening/Widening)	1,865,000	1,166,000	541,000	158,000	0

Charleston Harbor is located about midway along South Carolina's Atlantic coastline. The harbor is the largest port in South Carolina and ranks first among container cargo ports on the Southeast and Gulf coasts, handling approximately 50 percent of all container tonnage among competing ports. The authorized project provides for a 40-foot project from the Atlantic Ocean to Goose Creek, a distance of 27.1 miles. The commerce in Charleston Harbor has increased from 6,850,000 tons in 1982 to an estimated 9,700,000 tons in 1993, of which 6,400,000 tons were containerized cargo. Charleston Harbor also has a significant amount of coal and petroleum products traffic. There has been an increase in the size of vessels using the terminal facilities in Charleston Harbor. Presently, container vessels using the harbor have design drafts up to 44 ft and the bulk carriers have design drafts up to 49 ft. Many of these vessels are required to light load and/or make use of tidal advantage because of the existing depth. Deepening of the channels would allow more efficient use of deeper draft vessels. This study will determine the need for deepening the Charleston Harbor and Lower Shipyard River to depths up to 45 feet and for a turning basin for proposed terminal facilities on Daniel Island. The Feasibility Cost Sharing Agreement was executed on 24 March 1993 with the South Carolina State Ports Authority.

Fiscal Year 1995 funds are being used to continue the feasibility phase. The funds requested for Fiscal Year 1996 will be used to complete the feasibility study. The preliminary estimated cost of the feasibility phase is $3,110,000, which is being shared on a 50-50 basis by Federal and non-Federal interests. Up to one-half of the non-Federal share may be in-kind services. A summary of the study cost sharing is as follows:

Total Estimated Study Cost	$3,420,000
Reconnaissance Phase (Federal)	310,000
Feasibility Phase (Federal)	1,555,000
Feasibility Phase (Non-Federal)	1,555,000

The reconnaissance phase was completed in March 1993. The feasibility study is scheduled for completion in August 1996.

Study/Project	Total Estimated Federal Cost $	Allocation Prior to FY 1995 $	Allocation FY 1995 $	Tentative Allocation FY 1996 $	Additional to Complete After FY 1996 $
b. Flood Damage Prevention Studies.					
Florida					
Coast of Florida Erosion and Storm Effects Study	12,320,000	3,250,000	629,000	750,000	7,691,000

The Coast of Florida Erosion and Storm Effects Study includes the entire Florida coastline consisting of five major coastal regions. The east coast area from the Florida-Georgia state line to the Florida Keys, a distance of more than 500 miles is divided into three regions, the northeast, east, and southeast. The shoreline consists of a series of sandy barrier islands broken by inlets. The peninsular Gulf Coast region from Key West north to the Tampa-St Petersburg area is 150 miles, and is also composed of offshore barrier islands. The Panhandle Gulf Coast region extends from the Tampa-St Petersburg area to the Alabama state line, 370 miles of shoreline, of which 190 miles is composed of sandy beaches backed by dune lines with heights ranging from 10 to 15 feet. The National Shoreline Study identified 543 miles of Florida's shoreline as having storm damage problems. Causes of the damage include storms and urban development. The Florida 1990 population of 12.8 million is expected to increase to 16.1 million by the year 2010 with concentrated increases in the coastal and barrier islands areas. The study will evaluate the existing Federal projects including harbors, inlets, and beach erosion control projects on a regional basis to determine whether modifications are warranted that would provide regional efficiencies or separate project improvements, and provide a better understanding of coastal processes. The Geographical Information System will be used to formulate enhanced coastal storm damage protection projects. The feasibility study has been undertaken as a series of five regional feasibility reports. The first region being studied is the southeast coast. The east coast region will be the second area studied. The Florida Department of Environmental Protection is the non-federal sponsor for the feasibility phase of the study. The feasibility cost sharing agreement was executed in July 1988.

Study/Project	Total Estimated Federal Cost $	Allocation Prior to FY 1995 $	Allocation FY 1995 $	Tentative Allocation FY 1996 $	Additional to Complete After FY 1996 $

Fiscal Year 1995 funds are being used to complete feasibility studies for the southeast coast (Region III) and initiate feasibility studies for the east coast region (Region IV). The funds requested for Fiscal Year 1996 will be used to continue feasibility efforts on Region IV. The estimated cost of the feasibility phase for all five regions is $22,218,000, which is being shared on a 50-50 percent basis by Federal and non-Federal interests. Up to one half of the non-federal share may be in-kind services.

A summary of study cost sharing is as follows:

Total Estimated Study Cost	$23,429,000
Reconnaissance Phase (Federal)	1,211,000
Feasibility Phase (Federal)	11,109,000
Feasibility Phase (Non-Federal)	11,109,000

The reconnaissance phase was completed in June 1988. Completion of the feasibility study for Region III is scheduled for September 1995. Separate feasibility documents will be prepared for the remaining four regions. Completion dates are being determined for the remaining four feasibility studies.

Study/Project	Total Estimated Federal Cost $	Allocation Prior to FY 1995 $	Allocation FY 1995 $	Tentative Allocation FY 1996 $	Additional to Complete After FY 1996 $
Mississippi					
Hancock, Harrison, & Jackson Counties	600,000	320,000	218,000	62,000	0

The study area is approximately 2,600 square miles in size and includes the drainage areas in the coastal Mississippi counties of Hancock, Harrison, and Jackson. Major streams in the area include the Pearl, Jordan, Wolf, Tchoutacabouffa, Biloxi, Escatawpa, and Pascagoula Rivers. The principal water resources problems to be investigated by this study consist of flooding, commercial navigation, and environmental restoration and protection in all three counties. The population of the study area is increasing at approximately twice the rate for the state, and increased urbanization has accentuated the flooding problems in the area. Significant floods resulting in Presidential Disaster Declarations occurred in January and April 1983, August 1987, and January and May 1991 along the Biloxi, Wolf, and Tchoutacabouffa Rivers. During the past eleven years flood damages to residential and commercial properties have totaled $14 million, the most significant being $2.3 million in 1983, $1.2 million in 1987, and $4.7 million in 1991. Continued growth and relatively frequent flooding in the area warrant investigation and resolution of the flood problems as early as possible.

Fiscal Year 1995 funds are being used to complete the reconnaissance report at full Federal expense. The funds requested for Fiscal Year 1996 will be used to complete the reconnaissance phase. The reconnaissance phase is scheduled for completion in December 1995.

Study/Project	Total Estimated Federal Cost $	Allocation Prior to FY 1995 $	Allocation FY 1995 $	Tentative Allocation FY 1996 $	Additional to Complete After FY 1996 $
c. Shoreline Protection Studies.					
Florida					
Brevard County	684,000	387,000	190,000	107,000	0

The Brevard County study area covers 72 miles of the Central Florida Atlantic Coast and includes the inlet at Canaveral Harbor, which is located south of the Cape Kennedy Space Center. The northeaster of November 1984 eroded 1.3 million cubic yards of sand from approximately 40 miles of the county shoreline resulting in an economic loss of $3.8 million from tourism. Over 120 emergency permits were issued for repairs and reconstruction of coastal armor. The shores of the county are continuing to erode, increasing the probability of major structural damage. The purpose of the study is to evaluate the erosion problems and determine the most suitable shore protection measures county wide. It will include evaluation of the existing Federal project. The project was authorized in 1968 and provides for initial beach fill and periodic nourishment for the City of Canaveral (2.8 miles), and Indialantic and Melbourne Beach (2.0 miles). Approximately 22 miles of shoreline in southern Brevard County have been identified as potential projects during the reconnaissance phase completed in June 1993, with the first row of development valued at $393 million susceptible to damage. The feasibility cost sharing agreement was executed in June 1993 with Brevard County.

FiscaL Year 1995 funds are being used to continue the feasibility study. Fiscal Year 1996 funds will be used to complete the feasibility phase of the study. The feasibility phase cost of $962,000 is being shared on a 50-50 percent basis by the Federal and non-Federal interests. Up to one-half of the non-Federal share may be in-kind services. A summary of study cost is as follows:

Total Estimated Study Cost	$1,165,000
Reconnaissance Phase (Federal)	203,000
Feasibility Phase (Federal)	481,000
Feasibility Phase (Non-Federal)	481,000

The reconnaissance phase was completed in June 1993. The feasibility study is scheduled to be completed in June 1996.

APPROPRIATION TITLE: General Investigations, Fiscal Year 1996 South Atlantic Division

Study/Project	Total Estimated Federal Cost $	Allocation Prior to FY 1995 $	Allocation FY 1995 $	Tentative Allocation FY 1996 $	Additional to Complete After FY 1996 $
Daytona Beach Shores	392,000	160,000	52,000	112,000	68,000

The study will investigate shoreline storm damage within the jurisdiction of the City of Daytona Beach Shores, Florida. This represents approximately 4.6 miles of shoreline. The City of Daytona Beach Shores is located north of Ponce de Leon Inlet, a Federal navigation project, and just south of Daytona Beach, Florida. The Thanksgiving Holiday Storm of November 21-24, 1984, caused wide spread damage on Florida's east coast, including the ocean shores of the study area. Based on data collected by the Corps in the mid 1970's, over $7.1 million in structural damages would occur within the City Limits of Daytona Beach Shores if a 100-year storm surge event were to occur, and over $3.2 million in structural damages would occur if a 50-year event happened. The value of first row development in Daytona Beach Shores is approximately $420 million. The reconnaissance study indicated sufficient economic justification for Federal participation in a shore protection project. The feasibility cost sharing agreement will be executed in July 1995. The city of Daytona Beach Shores is the study sponsor, and has indicated a willingness to cost share the feasibility study.

Fiscal Year 1995 funds are being used to complete the reconnaissance phase and to initiate the feasibility study. Fiscal Year 1996 funds will be used to continue into the feasibility phase of the study. The estimated cost of the feasibility phase is $464,000 which is being shared on a 50-50 percent basis by Federal and non-Federal interests. Up to one half of the non-Federal share may be in-kind services. A summary of study cost sharing is as follows:

Total Estimated Study Cost	$624,000
Reconnaissance Phase (Federal)	160,000
Feasibility Phase (Federal)	232,000
Feasibility Phase (Non-Federal)	232,000

The reconnaissance phase is scheduled to be completed in July 1995. A completion date is being determined for this feasibility study.

Study/Project	Total Estimated Federal Cost $	Allocation Prior to FY 1995 $	Allocation FY 1995 $	Tentative Allocation FY 1996 $	Additional to Complete After FY 1996 $
North Carolina					
Dare County Beaches	2,097,000	611,000	352,000	290,000	844,000

Dare County is located on the northern coast of North Carolina about 40 miles south of the North Carolina-Virginia state line. The study area covers approximately 85 miles of oceanfront beach in Dare County, which includes approximately 53 miles of oceanfront within the Cape Hatteras National Seashore south of Nags Head. In addition to damage caused by hurricanes, winter storms regularly damage or destroy structures near the shoreline. Two storms which occurred in late October and early November 1991 caused $4,125,000 in structural damages to nearly 500 buildings. The results of the reconnaissance study support additional Federal involvement in a feasibility phase study of approximately 20 miles of oceanfront in northern Dare County. The feasibility phase will determine the most effective method of providing improvements. The plan of protection that will be considered is a beachfill consisting of a storm berm and where necessary, repairs to the dune line where it has been damaged by storms. The feasibility cost-sharing agreement was signed in May 1994 with the study sponsor, Dare County.

Fiscal Year 1995 funds are being used to continue the feasibility phase including engineering and economic studies. The funds requested for Fiscal Year 1996 will be used to continue the feasibility phase. The estimated cost of the feasibility phase is $3,222,000, which is to be shared on a 50-50 percent basis by Federal and non-Federal interests. Up to one half of the non-Federal share may be in-kind services. A summary of study cost sharing is as follows:

Total Estimated Study Cost	$3,708,000
Reconnaissance Phase (Federal)	486,000
Feasibility Phase (Federal)	1,611,000
Feasibility Phase (Non-Federal)	1,611,000

The reconnaissance phase was completed in May 1994. A completion date is being determined for this feasibility study.

Study/Project	Total Estimated Federal Cost $	Allocation Prior to FY 1995 $	Allocation FY 1995 $	Tentative Allocation FY 1996 $	Additional to Complete After FY 1996 $
3. PRECONSTRUCTION ENGINEERING AND DESIGN (PED) - CONTINUING					
a. Navigation.					
Florida					
Hillsboro Inlet	450,000	0	150,000	300,000	0

Hillsboro Inlet is on the east coast of Florida in Broward County about midway between Deerfield Beach and Pompano Beach. The authorized navigation project is for a channel 8 feet deep and 100 feet wide from the Intracoastal Waterway to a point 1,500 feet oceanward in Hillsboro Inlet where the depth increases to 10 feet and the width becomes 150 feet to deep water in the Atlantic Ocean. Two jetties are included at the ocean entrance on each side. A permanent 10 inch floating dredge is also part of the project to maintain the navigation channel and transfer sand across the inlet. Increases in boat traffic at the inlet and problems keeping the channel open are causing hazardous conditions for boaters in the area. About 50 commercial fishing and over 30 charter boats use the inlet which involves high risk of damage to vessels. Some commercial shrimp boats now travel to Port Everglades for ocean access rather than take the risk. The commercial catch handled through the inlet amounts to an estimated 7.2 million pounds of seafood a year. The Hillsboro Inlet Improvement and Maintenance District, the local sponsor, is concerned about the boater safety associated with conditions in the inlet and wants to improve the depths in the channel consistent with the authorized Federal project.

The project is authorized in Section 301 in the Rivers and Harbors Act of 1965. Average annual equivalent costs and benefits for the navigation work at that time were $58,000 and $85,000, respectively, for a benefit to cost of 1.5 to 1. The current estimated cost is about $3.8 million. Benefits will be derived from commercial navigation.

Fiscal Year 1995 funds are being used to conduct a reevaluation study to determine what modifications are necessary to provide the authorized Federal project and if any additional modifications are justified and meets current day needs. If favorable and within the limits of the authorized project, preconstruction engineering and design will be continued. Funds requested for Fiscal Year 1996 will be used to complete preconstruction engineering and design in September 1996.

APPROPRIATION TITLE: General Investigations, Fiscal Year 1996 South Atlantic Division

Study/Project	Total Estimated Federal Cost $	Allocation Prior to FY 1995 $	Allocation FY 1995 $	Tentative Allocation FY 1996 $	Additional to Complete After FY 1996 $
Panama City Harbor	2,600,000	1,980,000	335,000	285,000	0

Panama City Harbor is a deep-draft port on St. Andrew Bay, with an entrance channel to the Gulf of Mexico, at Panama City, in northwest Florida. The existing project provides for a Gulf approach channel 34 feet deep by 450 feet wide, stabilized at the entrance by rubble mound jetties, and a bay channel 32 feet deep by 300 feet wide. Recent increases in traffic calling at the port and developments in innovative disposal techniques, especially ocean dumping, which offer possible solutions to earlier disposal problems, warranted resumption of design studies. An Initial Appraisal was completed September 14, 1988, which recommended continuing investigations to determine the optimum channel configuration. Authorized project improvements, estimated to cost $20,000,000 with an estimated Federal cost of $14,797,000 and an estimated non-Federal cost of $5,203,000, include: deepening the Gulf approach channel to 42 feet and the bay channel to 40 feet, providing a 177 acre anchorage area 40 feet deep in mid-bay, and adding from the northern end of the bay channel two 36 feet deep by 300 feet wide channels; one to Dyers Point Terminal and one to Bay Harbor Terminal. The average annual benefits amount to $1,329,000, all for commercial navigation. The benefit cost ratio is 1.7 to 1 based upon the latest economic analysis dated September 1991. The non-Federal sponsor, Panama City Port Authority, furnished a letter of intent on June 14, 1989 expressing their intent to share the project costs.

The project was authorized in 1972 with resolutions by both U.S. Senate and House of Representatives under the provisions of Section 201 of the 1965 Flood Control Act. In accordance with the cost sharing and financing concepts reflected in the Water Resources Development Act of 1986, the sponsor will be required to provide lands, easements, rights-of-way, relocations and dredged material disposal areas (LERRD), presently estimated at $77,000; berthing areas estimated at $220,000; pay a cash contribution during construction which equals 25 percent of the cost allocated to navigation, presently estimated at $4,906,000; and pay an additional 10 percent of the costs allocated to navigation within a period not to exceed 30 years following completion, which is partially offset by a credit for LERRD.

Fiscal Year 1995 funds are being utilized to complete environmental documentation and the General Reevaluation Report and to initiate plans and specifications for the construction contract. Fiscal Year 1996 funds will be used to complete preconstruction engineering and design in September 1996.

Study/Project	Total Estimated Federal Cost $	Allocation Prior to FY 1995 $	Allocation FY 1995 $	Tentative Allocation FY 1996 $	Additional to Complete After FY 1996 $
St. Lucie Inlet	1,100,000	0	0	400,000	700,000

The project was authorized by Section 201 of the 1974 River and Harbor Act (PL 89-298). The project provides for a channel 16 foot deep and 300 feet wide across the outer rock reef (Bar Cut), tapering to 10 feet deep and 150 feet wide through the inlet, and a channel 7 feet deep and 100 feet wide between the inlet and the Intracoastal Waterway. The authorized inlet improvements are multi-purpose in nature. The channel dredging benefits both commercial and recreational boats by providing a deeper and wider channel. The sediment impoundment basin adjacent to the north jetty was constructed to reduce the maintenance from once a year to once every two years, a benefit to navigation. At the same time, the sediment trapped in the impoundment basin is bypassed to nourish the now eroding beaches for a 3.5 mile distance south of the inlet. An extension of the north jetty in a southeasterly direction was constructed to improve navigation through the entrance channel. A detached breakwater immediately south of the entrance channel was constructed to improve channel protection and to protect the impoundment basin from waves approaching from the southeast. The south jetty was constructed to reduce sediment moving into the inlet from the south and improve navigation through the inlet during wave conditions approaching from the southeast. Construction of these authorized improvements were completed in October 1982.

At the sponsor's request, construction of the south jetty was completed 1,000 feet short of its authorized length. In addition, the sand impoundment basin was not constructed to its authorized design capacity as a shallow subsurface rock formation (Anastasia formation) was encountered during construction. As a result, inlet navigability is hindered due to excessive shoaling within the channels and the formation of flood shoals in the interior waters. Inadequate performance of the project's sediment bypassing system provides for excessive erosion of the beaches south of the inlet due to the inlet's high sediment trapping efficiency. The Florida Shore and Beach Preservation Association, Inc. indicated in their December 1992 newsletter, Frontline, that "The adverse effect of St. Lucie Inlet on the downdrift (southern) shoreline is more severe than any other in the State."

Economic and engineering studies to validate the feasibility of the project under current conditions is scheduled to be complete September 1995. Fiscal Year 1996 funds will be used to resume preconstruction, engineering, and design (PED). The Martin County Board of Commissioners passed a resolution on July 14, 1992, requesting Congress to authorize project funding to re-evaluate the impoundment basin at St. Lucie Inlet. A completion date is being determined for this preconstruction engineering and design effort.

APPROPRIATION TITLE: General Investigations, Fiscal Year 1996 — South Atlantic Division

Study/Project	Total Estimated Federal Cost $	Allocation Prior to FY 1995 $	Allocation FY 1995 $	Tentative Allocation FY 1996 $	Additional to Complete After FY 1996 $
Georgia					
Lower Savannah River	600,000	0	0	250,000	350,000

The Lower Savannah River Basin includes the Savannah River and surrounding wetlands from the start of the Savannah River Below Augusta Project which begins at the upper end of the Savannah Harbor (mile 21.31) to the head of navigation at Augusta just above the 13th Street bridge (mile 202.16), a distance of 180.85 miles. Numerous cuts have been made in the past to straighten the navigation channel. The river cut-offs created have begun to silt up, resulting in decreased flow through these areas with a degradation of the environment. An interim feasibility report is scheduled for completion in February 1996. The recommended project, estimated to cost $12.0 million with an estimated Federal cost of $9.0 million and an estimated non-Federal cost of 3.0 million, includes construction of diversion structures to increase the flow into navigation cuts 3 and 4 about 40 miles upstream of the Atlantic Ocean entrance. The increased flow will restore fish and wildlife habitat and improve water quality. The non-Federal Sponsor, the City of Savannah, Georgia is participating in the cost sharing of the feasibility report and has indicated intent to cost share in construction.

In accordance with the cost sharing and financing concepts reflected in the Water Resources Development Act of 1986, the non-Federal sponsor will be required to pay 25 percent of the construction costs.

Fiscal Year 1996 funds will be used to initiate work on the plans and specifications. Preconstruction Engineering and Design is scheduled for completion in September 1997.

APPROPRIATION TITLE: General Investigations, Fiscal Year 1996

Study/Project	Total Estimated Federal Cost $	Allocation Prior to FY 1995 $	Allocation FY 1995 $	Tentative Allocation FY 1996 $	Additional to Complete After FY 1996 $
North Carolina					
Wilmington Harbor Channel Widening	1,350,000	310,000	470,000	570,000	0

Wilmington Harbor is located near Wilmington on the southern coast of North Carolina in New Hanover and Brunswick Counties. Local commercial navigation interests have requested various turns and bends be widened and a passing lane be provided in the 26 miles of river channel between the mouth of the Cape Fear River and the turning basin above the North Carolina State Ports Authority terminal. Widening the five turns and bends would provide wider and safer turns in the harbor, thus reducing vessel delays. The passing lane would allow large ships, up to a beam of 106 feet or Panamax class, to avoid major delays caused by inability to pass and to increase or maintain speed throughout the widened portion of the river. The cost-shared feasibility study report was completed in March 1994. The recommended project, estimated to cost $25,800,000 with an estimated Federal cost of $18,795,000 and an estimated non-Federal cost of $7,005,000, consists of widening the existing 38 foot deep by 400 foot wide project to 600 feet wide over a total length of 6.2 miles and widening five turns and bends by 75 to 140 feet providing a total average navigation channel width of 500 to 675 feet. The average annual benefits amount to $3,238,000, all for commercial navigation. The benefit to cost ratio is 1.5 to 1 based upon the latest economic analysis dated March 1994. The non-Federal sponsor, the State of North Carolina, expressed strong support for the project in a June 30, 1993, meeting and in a letter dated March 17, 1994.

In accordance with the cost sharing and financing concepts reflected in the Water Resources Development Act of 1986, the non-Federal sponsor must provide lands, easements, rights of way, and dredged material disposal areas, presently estimated at $890,000; pay 25 percent of the cost of construction of the general navigation portion which has a depth in excess of 20 feet but not in excess of 45 feet, presently estimated at $6,115,000; pay an additional 10 percent of the cost of the general navigation features of the project in cash over a period not to exceed 30 years, presently estimated at $1,550,000 with credit for the value of lands, easements, rights of way, relocations and dredged material disposal areas.

Fiscal Year 1995 funds are being used to continue preconstruction engineering and design to include subsurface analysis, real estate planning and initiation of plans and specifications. Fiscal Year 1996 funds will be used to complete preconstruction engineering and design in September 1996.

Study/Project	Total Estimated Federal Cost $	Allocation Prior to FY 1995 $	Allocation FY 1995 $	Tentative Allocation FY 1996 $	Additional to Complete After FY 1996 $
b. Flood Control.					
North Carolina Brunswick County Beaches	3,511,000	1,617,000	394,000	500,000	1,000,000

The authorized project is located in Brunswick County, North Carolina. The authorized plan includes a continuous vegetated dune and high beach berm stabilized by periodic nourishment. The dune crown width is 25 feet at elevation 20 feet above mean sea level fronted by a storm berm having a width of 50 feet at elevation 15 feet above mean sea level. The beach segment is 28,000 feet in length. The authorized plan would reduce average annual damages along the project areas due to hurricane and storm action and beach erosion. The estimated project construction cost for the Ocean Isle portion is $58,900,000, with an estimated Federal cost of $38,300,000 and an estimated non-Federal cost of $20,600,000. The average annual benefits and benefit-cost ratio will be determined during the reevaluation, currently underway.

The project was authorized by the Flood Control Act of 1966. An economic reevaluation of the Long and Yaupon Beaches portion was approved in March 1990 which indicated that this portion was not economically justified. In November 1989, following Hurricane Hugo, the Town of Ocean Isle Beach requested reevaluation of the Ocean Isle Beach Portion. This effort was initiated in Fiscal Year 1990. The Towns of Long, Yaupon, Holden and Caswell Beaches have recently requested reevaluations of their portions of the project using storm damage and economic models that were not available when previous reevaluations were conducted. In accordance with the cost sharing and financing concepts reflected in the Water Resources Development Act of 1986, the non-Federal sponsor for Ocean Isle must provide all lands, easements and rights of way, including suitable borrow and spoil disposal areas, presently estimated at $11,100,000; pay 35 percent of the first costs and future nourishment allocated to hurricane and storm damage reduction which is partially offset by a credit for the value of lands, easements, and rights of way, including suitable borrow and spoil disposal areas presently estimated at $5,100,000 and $4,400,000 respectively; and bear all costs of operation, maintenance, and replacement of hurricane storm damage reduction facilities. The project sponsor, the Town of Ocean Isle Beach, indicated their support for their portion of the project in a letter dated November 1989.

Fiscal Year 1995 funds are being used to complete the General Reevaluation Report and environmental assessment for Ocean Isle and initiate reevaluations of the other portions. Fiscal Year 1996 funds will be used to prepare the plans and specifications for Ocean Isle and continue the reevaluations of the other portions. A completion date is being determined for this preconstruction engineering and design effort.

Study/Project	Total Estimated Federal Cost $	Allocation Prior to FY 1995 $	Allocation FY 1995 $	Tentative Allocation FY 1996 $	Additional to Complete After FY 1996 $
Puerto Rico					
Arecibo River	1,300,000	494,000	$461,000	281,000	64,000

The city of Arecibo is located on the northern coast of Puerto Rico, approximately 40 miles west of San Juan. The Rio Arecibo Basin covers a 272 square mile area and has experienced numerous floods over recent years. The upstream towns of Utuado, Jayuya, and Adjuntas have also been subject to the frequent flooding. The largest flood of record occurred in 1899, with significant events in May and October 1985. Over 500 acres of urbanized city area are impacted by floods including 800 residences, and over 100 businesses and public facilities. In addition to quantifiable damages, severe disruption of transportation and socio-economic activities resulted from these floods. A Feasibility Report was completed in September 1993. The proposed project, estimated to cost $23,400,000, with an estimated Federal cost of $12,500,000 and an estimated non-Federal cost of $10,900,000, includes channel improvements, a flood wall, and a levee along the Arecibo River; a levee along the Tanama River; and a plug, channel improvements, and a diversion channel along the Santiago River. The average annual benefit of $7,200,000 is primarily for flood control and the benefit-cost ratio is 3.8 to 1 based upon latest economic analysis dated July 1993. The non-Federal sponsor is the Department of Natural Resources for the Commonwealth of Puerto Rico and the Secretary publicly expressed his support for the project at the Feasibility Review Conference held May 15-16, 1991.

In accordance with the cost-sharing and financing concepts reflected in the Water Resources Development Act of 1986, local interests are required to provide all lands, easements, and rights-of-way, including suitable borrow and spoil disposal areas, modify or relocate buildings, utilities, roads, and other facilities presently estimated at $9,551,000; pay 5 percent of the total cost allocated to flood control measures during construction presently estimated at $1,047,000; pay one-half of the separable costs allocated to recreation estimated to be $302,000; and bear all costs of operation, maintenance, and replacement of flood control and recreational facilities presently estimated at $65,000 annually.

Fiscal Year 1995 funds are being used to continue into the preconstruction engineering and design phase with Design Memorandum investigations including field investigations. Fiscal Year 1996 funds will be used to complete the Design Memorandum and initiate plans and specifications. Preconstruction engineering and design is scheduled for completion in September 1997.

APPROPRIATION TITLE: General Investigations, Fiscal Year 1996 South Atlantic Division

Study/Project	Total Estimated Federal Cost $	Allocation Prior to FY 1995 $	Allocation FY 1995 $	Tentative Allocation FY 1996 $	Additional to Complete After FY 1996 $
Rio Grande de Loiza	2,500,000	1,594,000	453,000	453,000	0

The Rio Grande de Loiza Basin is located in the eastern central part of the island of Puerto Rico and flows north into the Atlantic Ocean. The total basin area covers about 310 square miles. The 1980 population was about 514,000 which includes approximately 20 percent of the population of the San Juan Metropolitan area. Some 4,800 families residing in the basin are affected by the floods of the river and its tributaries, 4,300 of which live within the city of Caguas. Historical floods in the upper reaches of the Rio Grande de Loiza basin have significantly affected the urban areas of Caguas-Gurabo. The 1960, 1970, 1979, 1985, and 1987 floods caused extensive damage to the roads, utilities, farm lands, and livestock in the Caguas area. The 100-year flood puts 3 to 10 feet of water over the banks of the Loiza River, 2 to 11 feet in Caguitas, and 4 to 8 feet in Gurabo. Hundreds of families have received emergency housing and related emergency services during past floods. A feasibility report was completed in April 1991. The recommended project, estimated to cost $178,100,000 with an estimated Federal cost of $133,300,000 and an estimated non-Federal cost of $44,800,000, consists of a combination of channel improvements, levees and debris basins. Project implementation will result in $19,500,000 in annual benefits. The benefit-cost ratio is 1.5 to 1 based upon the latest economic analysis dated December 1991. The non-Federal sponsor is the Department of Natural Resources of the Commonwealth of Puerto Rico which furnished a letter of intent dated March 1991, to share the project construction costs.

The project is authorized for construction by the Water Resources Development Act of 1992 with the following cost sharing requirements: the Puerto Rico Department of Natural Resources will be required to provide lands, easements and rights-of-way, presently estimated at $33,162,000, pay 5 percent of the total cost allocated to flood control measures during construction presently estimated at $11,363,000; pay 50 percent of the separable costs allocated to recreation presently estimated at $335,000; and bear all costs of operation, maintenance and replacement of flood control facilities presently estimated at $76,000 annually.

Fiscal Year 1995 funds are being used to complete work on the Design Memorandum including detailed design studies and a Limited Reevaluation Report to update economic and environmental impacts and initiate plans and specifications. Fiscal Year 1996 funds will be used for completion of preconstruction engineering and design in September 1996.

Study/Project	Total Estimated Federal Cost $	Allocation Prior to FY 1995 $	Allocation FY 1995 $	Tentative Allocation FY 1996 $	Additional to Complete After FY 1996 $
c. Beach Erosion Control.					
Florida					
Panama City Beaches	5,000,000	4,159,000	426,000	415,000	0

The Panama City Beaches study area encompasses 18.5 miles of shoreline extending from the west jetty at the Panama City Harbor entrance channel westward to Philips Inlet, near the Bay/Walton County line. The shoreline is heavily developed with a mixture of beach front resort/recreational and residential structures. Portions of the beach have experienced steady shoreline and dune erosion, resulting in increased exposure and structural damages. Both beach front development and beach and dune erosion have continued, resulting in increased exposure to damages from storms. In 1987 the Bay County Tourist Development Council was formed and requested that the study be resumed with the Bay County Commission resuming its role as non-Federal sponsor. Results of a Reevaluation Report, approved by HQUSACE in December 1989, indicated that a feasible storm protection project exists. The recommended project, estimated at $103,400,000 with an estimated Federal cost of $71,346,000 and an estimated non-Federal cost of $32,054,000, includes renourishment over the 50-year project life, provides a 110 feet wide protective beach sloping upward to a 7 feet high storm berm for a total of 155 feet, fronting a 9 feet high dune with a 30 feet grassed crest width. Average annual benefits are estimated at $5,218,000, of which $2,609,000 would result from prevention of structural damages and $2,609,000 from recreational use. The benefit cost ratio is 1.4 to 1 based on the latest economic analysis dated June 1993. The Bay County Commission, the non-Federal sponsor, furnished a letter on August 13, 1987 expressing their intent to share the project construction costs.

The project is authorized for construction by the Water Resources Development Act of 1986 with the cost sharing requirement that the non-Federal sponsor will pay 35 percent of the estimated cost of hurricane and storm damage protection facilities, estimated at $32,054,000, and bear all costs of operation, maintenance, and replacement of storm damage protection facilities.

Fiscal Year 1995 funds will be used to complete the General Reevaluation Report and initiate plans and specifications. Fiscal Year 1996 funds will be used to complete preconstruction engineering and design in September 1996.

APPROPRIATION: Construction, General - Multiple Purpose Power

PROJECT: Jim Woodruff Powerhouse, FL (Major Rehabilitation), (New)

LOCATION: Jim Woodruff Lock and Dam is located at mile 106.4 on the Apalachicola River, 37 miles northwest of Tallahassee, Florida, in Jackson and Gadsden Counties, Florida. The navigation lock and fixed crest spillway are located on the right bank of the river. The powerhouse is on the left bank, across the river from the lock, adjacent to the gated spillway.

DESCRIPTION: The plan of improvement is to replace the three turbines and rewind the three generators. The plan also includes the replacement of several peripheral electrical components, most notably the transformers.

AUTHORIZATION: Section 2 of the River and Harbor Act of 1945, further modified by the River and Harbor Act of 1946.

REMAINING BENEFIT-REMAINING COST RATIO: 1.4 at 8 1/4 percent.

TOTAL BENEFIT-COST RATIO: 1.4 at 8 1/4 percent.

BASIS OF BENEFIT-COST RATIO: Benefits are from the Major Rehabilitation Evaluation Report at October 1993 price levels. The report is currently under review.

SUMMARIZED FINANCIAL DATA

Estimated Total Appropriation Requirement			$30,600,000
Future Non-Federal Reimbursement			$30,600,000
Estimated Federal Cost (Ultimate)			0
Estimated Non-Federal Cost			$30,600,000
Cash Contributions		$ 0	
Other Costs		$ 0	
Reimbursements		$30,600,000	
Power	$30,600,000		
Total Estimated Project Cost			$30,600,000
Allocations to 30 September 1994			0
Conference Allowance for FY 1995			0

		ACCUM. PCT.OF EST. FED. COST
Allocation for FY 1995	0	
Allocation through FY 1995	0	
Allocation Requested for FY 1996	600,000	2
Programmed Balance to Complete after FY 1996	30,000,000	
Unprogrammed Balance to Complete after FY 1996	0	

STATUS: (1 Jan 1995)	PERCENT COMPLETE	COMPLETION SCHEDULE
Entire Project	0	Being determined

Division: South Atlantic District: Mobile

6 February 1995

PHYSICAL DATA

- Replace main transformer
- Rewind 3 generators
- Replace 3 turbines including items listed below:
  - Runner
  - Shaft
  - Wicket gate bushings
  - Governor
  - Piping

JUSTIFICATION: The Jim Woodruff Powerhouse has experienced a decaying reliability level since the early 1970's. Contributing factors in the reliability decline are welded turbine blades, age and tailwater degradation that has increased hydraulic head and decreased submergence on the turbines. Engineering analysis shows that these problems along with increasing generating outages can be expected to continue, into the future. The result of these increased outages, as well as the reduced plant efficiencies, will be increased operation and maintenance costs, increased production costs and loss of generating revenues to the treasury. Continued operation of Jim Woodruff powerhouse in its deteriorated state without rehabilitation, has an impact on total power production costs in North Florida amounting to $3.5 million per year. Average annual benefits for the major rehabilitation project are $3,541,000.

FISCAL YEAR 1996: The requested amount will be applied as follows:

Initiate Contract	$ 300,000
Planning, Engineering, & Design	219,000
Construction Management	81,000
TOTAL	$ 600,000

NON-FEDERAL COST: The costs allocable to power are reimbursable, and will be reviewed and adjusted based on construction costs when the project becomes operational.

Requirements of Local Cooperation	Payments During Construction and Reimbursements	Annual, Operation, Maintenance, and Replacement Costs
Capital Cost allocated to power	$30,600,000	$ 0
Total Non-Federal Costs	$30,600,000	$ 0

STATUS OF LOCAL COOPERATION: Responsibility for repayment of hydropower costs rests with the Southeastern Power Administration pursuant to Federal law.

COMPARISON OF FEDERAL COST ESTIMATE: The current cost estimate of $30,600,000 is the initial estimate.

STATUS OF ENVIRONMENTAL IMPACT STATEMENT: A draft Environmental Assessment (EA) was prepared which addressed the expected impacts of the recommended alternative as well as other potential alternatives under consideration. The draft EA contained a biological assessment (BA), as required under the Endangered Species Act of 1973, which concluded with a determination of no adverse effect on the Gulf of Mexico sturgeon, a threatened species which occurs in the tailrace area. The draft EA, containing the BA, concluded with a Finding of No Significant Impact (FONSI). The Draft EA and FONSI were fully coordinated with the public and State and Federal agencies. The U.S. Fish and Wildlife Service (USFWS) concurred with the BA determination of no adverse effect on the sturgeon. The State of Florida determined the project to be consistent with the State Coastal Zone Management Program. The commenting agencies concurred with the FONSI for the recommended alternative discussed in the draft environmental documentation. Agency comments were then incorporated into the final EA and FONSI.

OTHER INFORMATION: None

APPROPRIATION TITLE: Construction General - Multiple Purpose Power

PROJECT: Hartwell Lake Powerhouse, GA and SC (Major Rehabilitation), (New)

LOCATION: The Hartwell Lake Powerhouse is located on the Savannah River, 89 miles north of Augusta, GA and 305 miles north of the mouth of the river.

DESCRIPTION: The recommended plan involves the rewinding of four generator units, the refurbishment of the turbines, and the replacement of key electrical/mechanical peripheral equipment to improve the overall reliability of the project, to reduce operation and maintenance costs, and to reduce unscheduled repair costs.

AUTHORIZATION: Flood Control Act approved 17 May 1950 and Flood Control Act approved 3 July 1958.

REMAINING BENEFIT-REMAINING COST RATIO: 3.1 to 1 at 8 percent

TOTAL BENEFIT-COST RATIO: 3.1 to 1 at 8 percent

BASIS OF BENEFIT-COST RATIO: Benefits are from the latest available Evaluation Report for New Major Rehabilitation forwarded to HQUSACE in July 1993, at 1993 price levels.

Division: South Atlantic   District: Savannah   Hartwell Lake Powerhouse, GA and SC

SUMMARIZED FINANCIAL DATA			ACCUM. PCT. OF EST. FED COST	STATUS (1 Jan 1995)	PERCENT COMPLETE	PHYSICAL COMPLETION SCHEDULE
Estimated Total Appropriation Requirement		$17,700,000		Entire Project	0	Being determined
Future Non-Federal Reimbursement		$17,700,000				
Estimated Non-Federal Cost (Ultimate)		$ 0				
Cash Contributions	$ 0					
Other Costs	$ 0					
Reimbursements	$17,700,000					
Power $17,700,000						
Total Estimated Project Cost		$17,700,000				
Allocations to 30 September FY 1994		$ 0				
Conference Allowance for FY 1995		$ 0				
Allocation for FY 1995		$ 0				
Allocations through FY 1995		$ 0				
Allocation Requested for FY 1996		$ 1,400,000	8			
Programmed Balance to Complete after FY 1996		$16,300,000				
Unprogrammed Balance to Complete after FY 1995		$ 0				

PHYSICAL DATA

Rewind Generators 4

Division: South Atlantic District: Savannah Hartwell Lake Powerhouse, GA and SC

6 February 1995

JUSTIFICATION: The Hartwell Powerplant, which was initially placed into operation in 1962, has over recent years suffered from frequent unanticipated powerplant shutdowns, an increased level of O&M costs for repair and routine maintenance, and a general decrease in hydropower capacity and power production. These problems have been linked to an acceptable practice of running the generators for extended periods of time at levels well past their rated capacity which was necessary to provide power needs. The proposed plan of improvement will replace the windings of four generators to state of the art condition and replace key turbine and electrical/mechanical components to allow an increase in hydropower capacity to be made available to the power marketing agencies. The Plan of Improvement will arrest the further degradation of the hydroelectric units, decrease operation and maintenance costs, improve the powerplant's overall reliability, and increase the power generation capability. Average annual benefits for hydroelectric power are $4,594,400.

FISCAL YEAR 1996: The requested amount will be applied as follows:

Planning, engineering, and design	$ 260,000
Rehabilitation of power plant	900,000
Construction management	240,000
Total	$ 1,400,000

NON-FEDERAL COST: The costs allocable to power are reimbursable, and will be reviewed and adjusted based on construction costs when the project becomes operational.

Requirements of Local Cooperation	Payments During Construction and Reimbursements	Annual Operation, Maintenance Repair, Rehabilitation, and Replacement Costs
Pay all costs allocated to hydropower and bear all costs of operation, maintenance, repair, rehabilitation and replacement of hydropower facilities.	$17,700,000	$ 120,000

STATUS OF LOCAL COOPERATION: Responsibility for repayment of hydropower costs rests with the Southeastern Power Administration pursuant to Federal Laws.

COMPARISON OF FEDERAL COST ESTIMATE: The current Federal cost estimate of $17,700,000 is the initial estimate.

STATUS OF ENVIRONMENTAL IMPACT STATEMENT: Based on the environmental analysis contained in the Evaluation Report dated July 1993, an Environmental Assessment with a FONSI has been completed and is contained in the FY 1995 Major Rehab Program, Hartwell Powerplant Evaluation Report.

OTHER INFORMATION: None.

APPROPRIATION TITLE: Construction General - Multiple Purpose Power

PROJECT: Thurmond Lake Powerhouse, GA and SC (Major Rehabilitation), (New)

LOCATION: The Thurmond Lake Powerhouse is located on the Savannah River, 22 miles north of Augusta, GA and 216 miles north of the mouth of the river.

DESCRIPTION: The recommended plan involves the rewinding of seven generator units, the replacement of the turbine rotating parts, and the refurbishment or replacement of key peripheral equipment in order to improve the overall reliability of the project, to reduce operation and maintenance costs, to reduce unscheduled repair costs, and to provide additional hydropower capacity and power revenues.

AUTHORIZATION: Flood Control Act of 1944.

REMAINING BENEFIT-REMAINING COST RATIO: 1.3 to 1 at 8 percent.

TOTAL BENEFIT-COST RATIO: 1.3 to 1 at 8 percent.

BASIS OF BENEFIT-COST RATIO: Benefits are from the latest available Evaluation Report for New Major Rehabilitation Project forwarded to HQUSACE in March 1994, at February 1994 price levels.

Division: South Atlantic District: Savannah Thurmond Lake Powerhouse, GA and SC

SUMMARIZED FINANCIAL DATA				ACCUM. PCT. OF EST. FED COST	STATUS (1 Jan 1995)	PERCENT COMPLETE	PHYSICAL COMPLETION SCHEDULE
Estimated Total Appropriation Requirement			$69,700,000		Entire Project	0	Being determined
Future Non-Federal Reimbursement			$69,700,000				
Estimated Non-Federal Cost (Ultimate)			$ 0				
Cash Contributions		$ 0					
Other Costs		$ 0					
Reimbursements		$69,700,000					
Power	$69,700,000						
Total Estimated Project Cost			$69,700,000				
Allocations to 30 September FY 1994			$ 0				
Conference Allowance for FY 1995			$ 0				
Allocation for FY 1995			$ 0				
Allocations through FY 1995			$ 0				
Allocation Requested for FY 1996			$ 2,200,000	3			
Programmed Balance to Complete after FY 1996			$67,500,000				
Unprogrammed Balance to Complete after FY 1996			$ 0				

PHYSICAL DATA

Rewind Generators	7

Division: South Atlantic District: Savannah Thurmond Lake Powerhouse, GA and SC

6 February 1995

JUSTIFICATION: The J. Strom Thurmond Powerplant, which was initially placed into operation in 1954, is showing signs of excessive wear of the generators, the peripheral equipment and the turbines. This has resulted in a loss of efficiency, reduced reliability of the units and lost power output for the units. The proposed plan of improvement calls for rewinding the generators to maximum capacity, replacement of the turbine runner, and the replacement or refurbishment of key electrical/mechanical peripheral equipment. The Plan of Improvement will arrest the further degradation of the hydroelectric units, decrease operation and maintenance costs, improve the powerplant's overall reliability, and increase the power generation capability. Average annual benefits for hydroelectric power are $7,890,000.

FISCAL YEAR 1996: The requested amount will be applied as follows:

Planning, engineering, and design	$ 706,000
Rehabilitation of power plant	1,158,000
Construction management	336,000
Total	$ 2,200,000

NON-FEDERAL COST: The costs allocable to power are reimbursable, and will be reviewed and adjusted based on construction costs when the project becomes operational.

Requirements of Local Cooperation	Payments During Construction and Reimbursements	Annual Operation, Maintenance Repair, Rehabilitation, and Replacement Costs
Pay all costs allocated to hydropower and bear all costs of operation, maintenance, repair, rehabilitation and replacement of hydropower facilities.	$69,700,000	$ 485,000

STATUS OF LOCAL COOPERATION: Responsibility for repayment of hydropower cost rests with the Southeastern Power Administration pursuant to Federal Laws.

COMPARISON OF FEDERAL COST ESTIMATE: The current Federal cost estimate of $69,700,000 is the initial estimate.

STATUS OF ENVIRONMENTAL IMPACT STATEMENT: Based on the environmental analysis contained in the Evaluation Report dated March 1994, an Environmental Assessment with a FONSI has been completed and is contained in the FY 1996 Major Rehab Program, J. Strom Thurmond Powerplant Evaluation Report.

OTHER INFORMATION: None.

APPROPRIATION: Construction, General - Channels and Harbors (Navigation)

PROJECT: Bayou La Batre, Alabama (Continuing)

LOCATION: The project is located in Mobile County, Alabama on the Mississippi Sound, about 30 miles south of Mobile, Alabama.

DESCRIPTION: The proposed plan of improvement is to deepen, widen, and extend the existing Federal channel serving Bayou La Batre, Alabama, as shown below. All work is programmed.

Provide a channel 18 feet deep and 120 feet wide within Mississippi Sound from the mouth of Bayou La Batre channel south to the Gulf Intracoastal Waterway (GIWW), then west along the GIWW alignment to the Pascagoula Ship Channel. Existing channel is 12 feet deep and 100 feet wide.

Provide a channel 18 feet deep and 100 feet wide for a distance of approximately 1.8 miles from the mouth of the Bayou upstream to and including the turning basin. The existing channel is 12 feet deep and 100 feet wide.

Provide a channel 14 feet deep and 75 feet wide from the turning basin to the Highway 188 bridge crossing, the terminus of the existing Federal project. The existing channel is 12 feet deep and 75 feet wide.

Extend a 14 feet deep and 75 feet wide channel approximately 1500 feet above the Highway 188 bridge.

Extend a 14 feet deep and 50 feet wide channel approximately 530 feet into Snake Bayou from the turning basin, thence a 12 feet deep and 50 feet wide channel approximately 985 feet.

AUTHORIZATION: Water Resources Development Act of 1990.

REMAINING BENEFIT-REMAINING COST RATIO: 16.7 to 1 at 8 7/8 percent.

TOTAL BENEFIT-COST RATIO: 3.1 to 1 at 8 7/8 percent.

INITIAL BENEFIT-COST RATIO: 3.0 to 1 at 8 7/8 percent (FY 1992).

BASIS OF BENEFIT-COST RATIO: Benefits are from the latest available evaluation approved in August 1989 at October 1988 price levels.

SUMMARIZED FINANCIAL DATA

Estimated Federal Cost	(CofE)		$ 6,279,000
Estimated Federal Cost	(U.S.C.G.)		60,000
Estimated Federal Cost			6,339,000
Estimated Non-Federal Cost			12,061,000
Cash Contributions		698,000	
Other Costs		11,363,000	
Total Estimated Project Cost			$18,400,000

		ACCUM. PCT.OF EST. FED. COST
Allocation to 30 September 1994	$ 4,094,000	
Conference Allowance for FY 1995	1,500,000	
Allocation for FY 1995	300,000 1/	
Allocations through FY 1995	4,394,000	70
Allocation Requested for FY 1996	1,000,000	86
Programmed Balance to Complete after FY 1996	885,000	
Unprogrammed Balance to Complete after FY 1996	0	

1/ Reflects $237,000 reduction assigned as savings and slippage, and $963,000 reprogrammed from the project.

STATUS: (1 Jan 1995)	PERCENT COMPLETE	PHYSICAL COMPLETION SCHEDULE
Entire Project	65	Sep 97

PHYSICAL DATA

CHANNELS:	18 feet deep and 100 feet wide	1.8 miles
	14 feet deep and 75 feet wide	0.9 miles
	18 feet deep and 120 feet wide	19.9 miles
	14 feet deep and 50 feet wide	0.1 miles
	12 feet deep and 50 feet wide	0.2 miles

JUSTIFICATION: Channel improvements are needed in order to reduce existing vessel damages and delays during entry and exit of the port by commercial fishing vessels; reduce existing vessel damages and delays to newly constructed or repaired vessels; eliminate existing split operations of certain shipbuilding enterprises for vessel construction and repair; allow the use of larger, deeper-draft vessels required for the emerging butterfish industry; and allow the shipbuilding interests to construct or repair larger, deeper draft vessels. Major commodities of the project are

JUSTIFICATION (Continued):

commercial fisheries, and shipbuilding and repair. Average annual tonnages and values over the past ten years include 21 million pounds of shrimp valued at $50 million. An additional $50 million in seafood is trucked to Bayou La Batre each year for processing. The shipbuilding industry constructs an average of 150 vessels per year at a value of $90 million and repairs 1,000 vessels at a value of $4.6 million. Extensive development and infrastructure to support the commercial fishing and shipbuilding industries exist at Bayou La Batre. Presently, 57 seafood processing establishments and 17 shipbuilding and repair industries are located adjacent to the bayou.

Without the proposed project, a large fleet of shrimp trawlers and butterfish vessels are damaged and/or delayed and their crews forego opportunities to earn incomes from shrimping or butterfishing because of inadequate channel depths. The 17 shipbuilding/repair facilities also incur extensive damages, delays, split operations, and forego mainly foreign contracts for larger construction/repair jobs because of the inadequate channel depths. With the project, the improved channel will generate $5,916,000 in annual benefits ($2,455,000 in commercial fishing benefits and $3,461,000 in shipbuilding/repair benefits which will come largely from foreign sales).

FISCAL YEAR 1996: The requested amount will be applied as follows:

Continue Channel Construction	$ 811,000
Planning, Engineering, and Design	100,000
Construction Management	89,000
Total	$1,000,000

NON-FEDERAL COST: In accordance with the cost sharing and financing concepts reflected in the Water Resources Development Act of 1986, the non-Federal sponsor must comply with the requirements listed below.

Requirements of Local Cooperation	Payments During Construction and Reimbursements	Annual Operation, Maintenance, and Replacement Costs
Provide lands, easements, rights-of-way, and borrow and excavated or dredged material disposal areas.	$ 1,560,000	$72,000

NON-FEDERAL COSTS (Continued):

Requirements of Local Cooperation	Payments During Construction and Reimbursements	Operation, Maintenance, and Replacement Costs
Modify or relocate utilities, roads, bridges (except railroad bridges), and other facilities, where necessary for the construction of the project.	9,803,000	
Pay 10 percent of the costs allocated to general navigation facilities during construction.	698,000	
Reimburse an additional 10 percent of the costs of general navigation features allocated to commercial navigation within a period of 30 years following completion of construction as entirely reduced by a credit allowed for the value of lands, easements, rights-of-way, relocations, and dredged or excavated material disposal areas provided for commercial navigation.	0	0
Total Non-Federal Costs	$12,061,000	$72,000

The non-Federal sponsor has agreed to make all required payments concurrently with project construction.

STATUS OF LOCAL COOPERATION: The local sponsor is the State of Alabama. The Local Cooperation Agreement was executed in May 1993.

A bond issue resolution was passed by the Alabama legislature on April 27, 1989 to obtain authorization for the State of Alabama to issue $6 million in general obligation bonds toward the Non-Federal share of project construction. The State will also obtain all second-party agreements from Mobile County and Bayou La Batre Port Authority to secure the remaining non-Federal financing above the $6 million to be provided by the State. The Port Authority passed a resolution pledging to secure its estimated $2.5 million in non-Federal financing. The Port Authority's financing was generated through general obligation bonds. The $2.5 million in funds from Mobile County was generated through the use of general fund surplus.

STATUS OF LOCAL COOPERATION (Continued):

The current non-Federal cost estimate of $12,061,000 includes a cash contribution of $698,000. The Local Cooperation Agreement includes a cash contribution of $827,000. In a letter dated 17 September 1991, the non-Federal sponsor indicated that it is financially capable and willing to contribute the non-Federal share of the cost. Our analysis of the non-Federal sponsor's financial capability to participate in the project affirms that the sponsor has a reasonable and implementable plan for meeting its financial commitment.

COMPARISON OF FEDERAL COST ESTIMATE: The current Federal (Corps) cost estimate of $6,279,000 is a decrease of $1,303,000 from the latest estimate of ($7,582,000) presented to Congress (FY 1995). This change includes the following items:

Item	Amount
Post Contract Award and other Estimating Adjustments	$ -1,303,000

STATUS OF ENVIRONMENTAL IMPACT STATEMENT: The final Environmental Impact Statement was filed with the Environmental Protection Agency in November 1988.

OTHER INFORMATION: Funds to initiate preconstruction engineering and design were appropriated in FY 1989. Funds to initiate construction were appropriated in FY 1992. The current completion date of September 1997 is a delay of 12 months from the lastest completion date reported to Congress, due to delays encountered by the local sponsor in designing bulkhead modifications and obtaining easements for bulkhead construction.

APPROPRIATION TITLE: Construction, General - Channels and Harbors (Navigation)

PROJECT: Black Warrior and Tombigbee Rivers, Vicinity of Jackson, Alabama (Continuing)

LOCATION: The project is located on the Tombigbee River in Clarke County in southwest Alabama in the city of Jackson, Alabama, approximately 90 miles north of Mobile, Alabama.

DESCRIPTION: The plan is to construct a spur canal approximately 9 feet deep, 300 feet wide, and 1000 feet long. All work is programmed.

AUTHORIZATION: Energy and Water Development Appropriations Act of 1987.

REMAINING BENEFIT-REMAINING COST RATIO: Not applicable.

TOTAL BENEFIT-COST-RATIO: Not applicable.

INITIAL BENEFIT-COST RATIO: Not applicable

BASIS OF BENEFIT-COST RATIO: Not applicable.

Estimated Federal Cost (CofE)		$16,141,000
Estimated Non-Federal Cost		6,159,000
Cash Contributions	1,793,000	
Other Costs	4,366,000	
Total Estimated Project Cost		$22,300,000

SUMMARIZED FINANCIAL DATA		ACCUM. PCT OF EST. FED. COST
Allocation to 30 September 1994	$ 950,000	
Conference Allowance for FY 1995	500,000	
Allocation for FY 1995	421,000 1/	
Allocation through FY 1995	1,371,000	8
Allocation Requested for FY 1996	500,000	12
Programmed Balance to Complete after FY 1996	$14,270,000	
Unprogrammed Balance to Complete after FY 1996	0	

1/ Reflects $79,000 reduction assigned as savings and slippage.

STATUS: (1 Jan 1995)	PERCENT COMPLETE	PHYSICAL COMPLETION SCHEDULE
Construction not started	0	Being determined

Division: South Atlantic

District: Mobile

6 February 1995

Black Warrior and Tombigbee Rivers,
Vicinity of Jackson, AL

PHYSICAL DATA

CHANNELS: Channel 300 feet wide by 1,000 feet long by 9 feet deep.

JUSTIFICATION: There are no public port facilities to serve Jackson, Alabama on the Black Warrior-Tombigbee waterway between Mobile, 90 miles to the south and Demopolis, 127 miles to the north. The port facility would produce transportation savings to commodities currently moving in the Jackson area.

FISCAL YEAR 1996: The requested amount will be applied as follows:

Continue Planning, Engineering and Design	500,000
Total	$ 500,000

NON-FEDERAL COST: In accordance with the cost sharing and financing concepts reflected in the Water Resource Development Act of 1986, the non-Federal sponsor must comply with the requirements listed below:

Requirements of Local Cooperation	Payments During Construction and Reimbursements	Annual Operation, Maintenance, and Replacement Costs
Provide lands, easements, rights-of-way, and borrow and excavated or dredged material disposal areas.	$3,960,000	
Pay 10 percent of the costs allocated to general navigation facilities during construction.	1,793,000	0
Pay 100 percent of the cost allocated to Berthing Area dredging (without credit)	406,000	
Reimburse an additional 10 percent of the costs of general navigation features allocated to commercial navigation within a period of 30 years following completion of construction, as entirely reduced by a credit allowed for the value of lands, easements, rights-of-way, relocations, and dredged or excavated material disposal areas provided for commercial navigation.	0	0
Total Non-Federal Cost	$6,159,000	$0

STATUS OF LOCAL COOPERATION: Voters of Clarke County, Alabama, approved a State Constitutional Amendment in the general election on 4 November 1986 which allowed the city of Jackson, Alabama, to appoint a Port Authority. The Jackson Port Authority will be the local sponsor. A Project Cooperation Agreement is scheduled to be signed in January 1997.

COMPARISON OF FEDERAL COST ESTIMATES: The current Federal (Corps) cost estimate of $16,141,000 is an increase of $12,532,000 over the latest estimate of ($3,609,000) presented to Congress (FY 1995). This change includes the following items:

Item	Amount
Price Escalation on Construction Features	$ 520,000
Design Changes	11,562,000
Schedule Changes	450,000
Total	$12,532,000

STATUS OF ENVIRONMENTAL IMPACT STATEMENT: The Final Environmental Impact Statement is scheduled to be filed with the Environmental Protection Agency in March 1996.

OTHER INFORMATION: Funds to initiate construction were appropriated in FY 1987.

APPROPRIATION TITLE: Construction, General - Locks and Dams (Navigation)

PROJECT: Tennessee-Tombigbee Waterway Wildlife Mitigation, Alabama and Mississippi (Continuing)

LOCATION: The project is located in the states of Alabama and Mississippi.

DESCRIPTION: The plan of improvement is to mitigate wildlife losses resulting from construction, operation, and maintenance of the Tennessee-Tombigbee Waterway project through acquisition of 88,000 acres of separable lands and management of 92,600 acres of existing project lands for mitigation purposes. All work is programmed.

AUTHORIZATION: Water Resources Development Act of 1986.

REMAINING BENEFIT - REMAINING COST RATIO: Not applicable. 1/

TOTAL BENEFIT - COST RATIO: Not applicable. 1/

INITIAL BENEFIT - COST RATIO: Not applicable. 1/

1/ Mitigation is incrementally justified through consideration of costs and non-monetary benefits; accordingly, a benefit-cost ratio has not been computed.

SUMMARIZED FINANCIAL DATA

			ACCUM. PCT. OF EST. FED. COST
Estimated Federal Cost (CofE)		$87,300,000	
Estimated Non-Federal Cost		0	
Cash Contributions $	0		
Other Costs	0		
Total Estimated Project Cost		$87,300,000	
Allocations to 30 September 1994		62,666,000	
Conference Allowance for FY 1995		9,600,000	
Allocation for FY 1995		8,081,000 2/	
Allocations through FY 1995		70,747,000	81

		ACCUM. PCT.OF EST. FED. COST
Allocation Requested for FY 1996	$ 12,400,000	95
Programmed Balance to Complete after FY 1996	4,153,000	
Unprogrammed Balance to Complete after FY 1996	0	

STATUS: (1 Jan 1995)	PERCENT COMPLETE	COMPLETION SCHEDULE
Entire Project	75	Sep 1997

2/ Reflects $1,519,000 reduction assigned as savings and slippage.

PHYSICAL DATA

LANDS: 88,000 acres. Not less than 20,000 acres are to be acquired in the area of the Mobile-Tensaw Delta, Alabama, and not less than 25,000 acres are to be acquired in the areas of the Pascagoula River, the Pearl River, and the Mississippi River Basins, Mississippi. Other lands are to be acquired anywhere in the States of Alabama and Mississippi.

INITIAL DEVELOPMENT PROGRAM: Various facilities will be constructed and habitat improvements undertaken on the separable and existing project lands included in the Mitigation Program. The facilities and improvement will include up to seven wildlife management complexes to serve as operational bases for the State agencies; approximately 40 miles of access roads; over 20 waterfowl impoundments; equipment purchases; forestation of over 5000 acres; installation of various nesting structures; establishment of food plots; and various wildlife plantings.

JUSTIFICATION: Construction of the Tennessee-Tombigbee Waterway (TTW) resulted in unavoidable, significant losses of wildlife resources. These losses result primarily from conversion of terrestrial habitats to open water for project pools and canals, construction of project facilities, deposition of excavated material, and construction of recreation facilities. Construction of the Waterway adversely impacted approximately 62,800 acres of wildlife habitat, of which approximately 34,000 acres of bottomland hardwood habitat were converted to open water and other less valuable habitats. Bottomland hardwoods are recognized as a diminishing resource on a regional and national scale and are considered to be the most productive wildlife habitat in the project area.

Implementation of the Tennessee-Tombigbee Waterway Wildlife Mitigation Project began in FY 1990. Under the mitigation plan, 88,000 acres of separable lands will be acquired and approximately 92,600 acres of existing project lands will be managed for mitigation purposes. The monetary and nonmonetary benefits of the authorized mitigation plan are deemed to outweigh the costs of the plan in order to replace the significant wildlife losses resulting from construction, and operation and maintenance of the Tennessee-Tombigbee Waterway project.

FISCAL YEAR 1996: The requested amount will be applied as follows:

Complete Land Acquisition	$ 7,900,000
Continue Initial Development Program on Existing Project Lands and Separable Lands	3,800,000
Continue Planning, Engineering and Design	500,000
Continue Construction Management	200,000
Total	$12,400,000

NON-FEDERAL COSTS: There are no non-Federal costs.

STATUS OF LOCAL COOPERATION: The authorizing legislation specifies that the states of Alabama and Mississippi shall provide for the management for wildlife purposes of lands acquired and lands currently owned by the United States in the project area which are designated as wildlife mitigation lands. The legislation also specifies that the Corps shall reimburse the states for such management and initial development costs as specified in a plan for management of mitigation lands to be developed jointly by the Corps, U.S. Fish and Wildlife Service (FWS), and the states of Alabama and Mississippi. The Mitigation Implementation Plan (MIP) for lands currently owned by the United States was developed jointly with the States and FWS as specified in the authorizing legislation. Three separate MIP's were prepared, one for each of the three separable land increments.

COMPARISON OF FEDERAL COST ESTIMATES: The current (Corps of Engineers) cost estimate of $87,300,000 is an increase of $600,000 over the latest estimate of ($86,700,000) presented to Congress (FY 1995). This change includes the following items:

Item	Amount
Price Escalation on Construction Features	$ 67,000
Post Contract Award and Other Estimating Adjustments	38,000
Price Escalation on Real Estate	495,000
Total	$ 600,000

STATUS OF ENVIRONMENTAL IMPACT STATEMENT: The acquisition of 88,000 acres of private land into public ownership has been adequately addressed in the Environmental Impact Statement (EIS) contained in the Tennessee-Tombigbee Waterway, Alabama and Mississippi, Wildlife Mitigation Feasibility Study Report (WMFSR). Lands purchased will be managed primarily for public purposes as discussed in the wildlife management plan of the WMFSR. The EIS satisfied the National Environmental Policy Act requirements. However, additional coordination with the Endangered Species Office of the U.S. Fish and Wildlife Service will be required before any management activities are undertaken on areas where Federally endangered or threatened species are known to exist, to comply with the provisions of the Endangered Species Act of 1973, as amended. Also, compliance with the provisions of the Clean Water Act and historic resources statutes will be required to assure that any adverse impacts from construction will be minimized.

OTHER INFORMATION: Funds to initiate preconstruction planning and construction were allocated in FY 1990. Funds to initiate land acquisition were appropriated in FY 1990. The scheduled completion date of September 1997 is a slippage from the latest completion date of September 1996 presented to Congress. This change is based on problems encountered in identifying and purchasing land from willing sellers.

APPROPRIATION TITLE: Construction, General - Channels and Harbors (Navigation)

PROJECT: Fort Pierce Harbor, Florida (Continuing)

LOCATION: Fort Pierce is located in St. Lucie County on the east coast of Florida about 120 miles north of Miami.

DESCRIPTION: The project provides for construction and maintenance of an entrance channel 30 feet deep and 400 feet wide leading to an interior channel 28 feet deep and 250 feet wide. The channel will terminate in a turning basin 1,100 feet in diameter by 28 feet deep. This basin would also connect to an access channel 250 feet wide, 1,250 feet long, and 28 feet deep. All work is programmed.

AUTHORIZATION: Water Resources Development Act of 1988.

REMAINING BENEFIT-REMAINING COST RATIO: 1.7 to 1 at 8 1/4 percent

TOTAL BENEFIT-COST RATIO: 1.7 to 1 at 8 7/8 percent

INITIAL BENEFIT- COST RATIO: 1.8 to 1 at 8 7/8 percent (FY 1991)

BASIS OF BENEFIT-COST RATIO: Benefits are from the April 1994 General Reevaluation Report at October 1993 price levels.

SUMMARIZED FINANCIAL DATA		ACCUM PCT. OF EST FED. COST	STATUS (1 Jan 1995)	PERCENT COMPLETE	PHYSICAL COMPLETION SCHEDULE
Estimated Appropriation Requirement (CoE)	$ 6,770,000				
Estimated Appropriation Requirement (USCG)	30,000		Channels	0	Mar 1996
Estimated Total Appropriation Requirement	6,800,000		Entire Project	0	Mar 1996
Future Non-Federal Reimbursement	900,000			PHYSICAL DATA	
Estimated Federal Cost (Ultimate)	5,900,000		Dredging 815,000 cubic yards		

SUMMARIZED FINANCIAL DATA (Continued)

			ACCUM. PCT. OF EST. FED. COST
Estimated Non-Federal Cost		3,600,000	
Cash Contributions	$ 2,364,000		
Other Costs	336,000		
Reimbursements: Navigation	900,000		
Total Estimated Project Cost		9,500,000	
Allocations to 30 September 1994		2,305,000	
Conference Allowance for FY 1995		2,200,000	
Allocation for FY 1995		1,875,000 1/	
Allocations through FY 1995		4,180,000	62
Allocation Requested for FY 1996		2,590,000	100
Programmed Balance to Complete after FY 1996		0	
Unprogrammed Balance to Complete after FY 1996		0	

1/ Reflects $348,000 reduction for savings and slippage and $23,000 reprogrammed to the project.

JUSTIFICATION: The major problem to shippers located within the Fort Pierce Harbor area is the lack of navigable channel depths for economic transport of their commodities. The existing authorized channel requires shipment in shallow to moderate draft vessels of the world fleet which involves a higher unit cost for the ocean haul than transport on larger vessels. This problem will be exacerbated in the future as the trend in the world fleet is toward deep-draft vessels for all ocean transport. Major commodities imported are aragonite while leading exports are fresh citrus and vegetables. Waterborne tonnage for 1989 was 210,135 tons. Savings per ton are $7.13 for fresh citrus and $2.50 for cement. Disposal sites for both suitable and unsuitable materials are available on the beach and the EPA approved offshore disposal area, respectively. Material will also be used in the Causeway Island borrow site as a beneficial use of dredged material. Vessels expected to call at the port in the future have drafts up to 29 feet for citrus and 36 feet for aragonite. Average annual benefits are as follows:

Annual Benefits	Amount
Commercial navigation	$ 1,319,000
Total	$ 1,319,000

FISCAL YEAR 1996: The requested amount will be applied as follows:

Complete Construction Dredging	$ 2,444,000
Construction Management	146,000
TOTAL	$ 2,590,000

NON-FEDERAL COST: In accordance with the cost sharing and financing concepts reflected in the Water Resources Development Act of 1986, the non-federal sponsor must comply with the requirements listed below.

Requirements of Local Cooperation	Payments During Construction and Reimbursements	Annual Operation, Maintenance, Repair, Rehabilitation, and Replacement Costs
Provide lands, easements, rights-of-way, and dredged material disposal areas.	$ 0	
Pay 25 percent of the costs allocated to deep draft navigation during construction	2,237,000	
Reimburse an additional 10 percent of the costs allocated general navigation facilities within a period of 30 years following completion of construction which is partially offset by a credit allowed for the value of lands, easements, rights-of-way, relocations, and dredged material disposal areas.	900,000	
Pay 100% of the costs associated with dredging berthing areas.	463,000	
Total Non-Federal Cost	3,600,000	0

The non-Federal sponsor has also agreed to make all required payments concurrently with project construction.

STATUS OF LOCAL COOPERATION: The local sponsor is the Ft Pierce Port and Airport Authority. A Project Cooperation Agreement reflecting the cost sharing principles in the Water Resources Development Act of 1986 was executed in October 1994.

COMPARISON OF FEDERAL COST ESTIMATES: The current Federal (Corps) cost estimate of $6,770,000 represents a decrease of $39,000 from the latest estimate of $6,809,000 presented to Congress (FY 1995). This change is for:

Item	Amount
Post Contract Award and Other Estimating Adjustments	$39,000
Total	$39,000

STATUS OF ENVIRONMENTAL IMPACT STATEMENT: The Final Environmental Impact Statement and Section 404(b)(1) were filed with the EPA on September 19, 1986. A Supplemental Environmental Impact Statement was completed in July 1994 and the Record of Decision signed in September 1994.

OTHER INFORMATION: Funds to initiate preconstruction engineering and design were appropriated in FY 1986. Funds to initiate construction were appropriated in FY 1991.

APPROPRIATION TITLE: Construction, General - Channels and Harbors (Navigation)

PROJECT: Manatee Harbor, Florida (Continuing)

LOCATION: Manatee Harbor is located in Manatee County on the east side of Tampa Bay 10 miles from the Gulf of Mexico. The channel extends from the main ship channel approximately 3 miles to Port Manatee.

DESCRIPTION: The project provides maintenance of the existing 40-foot deep channel and turning basin and provides for construction of a widener at the northwest end of the channel and enlargement of the turning Basin area.

AUTHORIZATION: The Water Resources Development Act of 1986 and the Water Resources Development Act of 1990.

REMAINING BENEFIT - REMAINING COST RATIO: 1.6 to 1 at 8 7/8 percent.

TOTAL BENEFIT - COST RATIO: 1.6 to 1 at 8 7/8 percent.

INITIAL BENEFIT - COST RATIO: 1.5 to 1 at 8 7/8 percent (FY 1988)

BASIS OF BENEFIT-COST RATIO: Benefits are included in the Manatee Harbor, Florida Limited Re-evaluation Report completed in March 1993 (revised January 1994) at December 1994 price level.

SUMMARIZED FINANCIAL DATA		
Estimated Federal Cost (CoE)		$ 18,684,000
Estimated Federal Cost (USCG)		16,000
Estimated Non-Federal Cost		14,300,000
Cash Contribution	$ 6,274,000	
Other	8,026,000	
Total Estimated Project Cost		33,000,000

ACCUM. PCT OF EST FED COST	STATUS: (1 Jan 1995)	PERCENT COMPLETE	PHYSICAL COMPLETION SCHEDULE
	Channels & Canals		
	Main Channels & Turning Basin	0	Being determined
	Entire Project	0	Being determined

Division: South Atlantic

District: Jacksonville

6 February 1995

SUMMARIZED FINANCIAL DATA (Continued):

Allocations to 30 September 1994	2,600,000	
Conference Allowance for FY 1995	600,000	
Allocations for FY 1995	505,000 1/	
Allocations through FY 1995	3,105,000	17
Allocations Requested for FY 1996	1,450,000	24
Scheduled Balance to Complete After FY 1996	14,145,000	
Unscheduled Balance to Complete After FY 1996	0	

1/ Reflects reduction of $95,000 for savings and slippage.

PHYSICAL DATA

Provide for maintenance of the existing 40-foot deep draft navigation channel and turning basin extending from the Tampa Bay Channel to Port Manatee. Initial construction of a widener at the northwest end of Manatee Harbor Channel and deepening of 6.6 acres to provide a larger turning basin. An 11.5 acre emergent island will be created as mitigation for the deepening.

JUSTIFICATION: In less than 9 years, Port Manatee became the major Non-Federal port in Florida. The Port is now and is expected to remain as a bulk commodity port which services deep draft vessels. The Manatee Port Authority continues to develop facilities in an going effort to attract waterborne interests. Shoaling in the channel has restricted vessel loadings resulting in increased transportation costs. The existing wideners and turning basin are not adequate for safe navigation. The project improvements would remedy those problems and help expand the economic base of the surrounding area. Estimated average annual benefits are as follows.

Annual Benefits	Amount
Deep Draft Navigation	$ 7,874,000
Total	$ 7,874,000

FISCAL YEAR 1996: The requested amount will be applied as follows:

Initiate Turning Basin Dredging	$1,278,000
Planning, Engineering, and Design	134,000
Construction Management	38,000
TOTAL	$1,450,000

NON-FEDERAL COST: In accordance with the cost sharing and financing concepts reflected in the Water Resources Development Act of 1986, the non-Federal sponsor must comply with the requirements listed below:

Requirements of Local Cooperation	Payments During Construction and Reimbursements	Annual Operation, Maintenance, Repair, Rehabilitation, and Replacement Costs
Provide lands, easements, rights of way, and dredged material disposal areas.	$ 25,000	
Pay 25 percent of the costs allocated to deep draft navigation during construction.	6,274,000	
Reimburse an additional 10 percent of the costs of general navigation features allocated to commercial navigation within a period of 30 years following completion of construction as reduced by a credit allowed for the value of lands, easements, rights of way, relocations, and dredged or excavated material disposal areas provided for commercial navigation.	0	
Pay 100% of the costs associated with dredging berthing areas and mitigation provisions.	8,001,000	
Total Non-Federal Cost	$ 14,300,000	

STATUS OF LOCAL COOPERATION: The Port Manatee Authority strongly supports this project. A Project cooperation agreement will be executed February 1995.

COMPARISON OF FEDERAL COST ESTIMATE: The current Federal (Corps of Engineers) cost estimate of $18,684,000 is an increase of $2,804,000 over the latest cost estimate of $15,880,000 submitted to Congress (FY 1995). This change includes the following:

ITEM	AMOUNT
Price Escalation on Construction Features	719,000
Post Contract Award and Other Estimating Adjustments	2,085,000
Total	$ 2,804,000

OTHER INFORMATION: Funds to initiate preconstruction engineering and design were appropriated in FY 1982. Funds to initiate construction were appropriated in FY 1988.

APPROPRIATION TITLE: Construction, General - Channels and Harbors (Navigation)

PROJECT: Miami Harbor Channel, Florida (Continuing)

LOCATION: Miami Harbor is located in Biscayne Bay, a shallow salt water sound on the Atlantic Coast near the southern end of the Florida peninsula.

DESCRIPTION: The project provides for construction and maintenance of a 44 feet deep entrance channel, 42 feet deep interior channels, and a turning basin with a depth of 42 feet and a diameter of 1,600 feet located at the Dodge-Lummus Island intersection. All work is programmed.

AUTHORIZATION: Water Resources Development Act of 1990.

REMAINING BENEFIT-REMAINING COST RATIO: 1.4 to 1 at 8 3/4 percent.

TOTAL BENEFIT-COST RATIO: 1.4 to 1 at 8 3/4 percent

INITIAL BENEFIT-COST RATIO: 1.5 to 1 at 8 3/4 percent

BASIS OF BENEFIT-COST RATIO: Benefits are from the June 1989 Feasibility Report as contained in the Chief of Engineers' Report dated 25 September 1989 at October 1988 price levels.

SUMMARIZED FINANCIAL DATA			ACCUM. PCT. OF EST. FED. COST	STATUS (1 Jan 1995)	PERCENT COMPLETE	PHYSICAL COMPLETION SCHEDULE
Estimated Appropriation Requirement (CoE)		$ 51,066,000				
Estimated Appropriation Requirement (USCG)		134,000				
Estimated Total Appropriation Requirement		51,200,000		Channels		
				Phase I	100	Aug 1993
Estimated Federal Cost (Ultimate)		51,200,000		Phase II	41	Dec 1997
Estimated Non-Federal Cost		32,500,000		Entire Project	31	Dec 1997
Cash Contributions	$ 27,564,000					
Other Costs	4,936,000					

Division: South Atlantic District: Jacksonville Miami Harbor Channel, FL

6 February 1995

SUMMARIZED FINANCIAL DATA (Continued):

Total Estimated Project Cost	83,700,000	
Allocations to 30 September 1994	13,809,000	
Conference Allowance for FY 1995	1,000,000	
Allocation for FY 1995	842,000 1/	
Allocations through FY 1995	14,651,000	29
Allocation Requested for FY 1996	1,000,000	31
Programmed Balance to Complete after FY 1996	35,415,000	
Unprogrammed Balance to Complete after FY 1996	0	

PHYSICAL DATA

Dredging 5,950,000 cubic yards

1/ Reflects $158,000 assigned as savings and slippage.

JUSTIFICATION: The port is the largest cruise ship terminal in the world as well as a major commercial harbor in Florida. Over 2.5 million passengers and 2.4 million tons of cargo passed through the harbor in 1986. Additionally, expansion of the port facilities has been occurring over the past several years. The June 1989 Feasibility Report identified problems with inadequate channel depths for deep draft navigation, an inadequate turning basin for vessels calling at Lummus/Dodge Island, and inadequate channel widths in the bar cut turn and in Government cut. Average annual benefits are as follows:

Annual Benefits	Amount
Navigation	
General Commercial	$ 9,752,000
Total	$ 9,752,000

FISCAL YEAR 1996: The requested amount will be applied as follows:

Complete Mitigation	$ 339,000
Construction Management	661,000
Total	$ 1,000,000

NON-FEDERAL COST: In accordance with the cost sharing and financing concepts reflected in the Water Resources Development Act of 1986, the non-federal sponsor must comply with the requirements listed below.

Requirements of Local Cooperation	Payments During Construction and Reimbursements	Annual Operation, Maintenance, Repair, Rehabilitation, and Replacement Costs
Provide lands, easements, rights of way, and dredged material disposal areas.	$ 53,000	
Modify or relocate utilities, roads, bridges, and other facilities, where necessary for the construction of the project.	2,471,000	
Pay 35 percent of the costs allocated to deep draft navigation during construction.	27,564,000	
Pay 100% of the costs associated with dredging berthing areas.	2,412,000	
Credit for Lands and relocations.	0	
Total Non-Federal Cost	$ 32,500,000	0

STATUS OF LOCAL COOPERATION: The local sponsor is the Miami Port Authority. The Port Authority awarded the Phase II contract in August 1994. An agreement for reimbursement under Section 204(e) of the Water Resources Development Act of 1986 was executed on 1 November 1991.

COMPARISON OF FEDERAL COST ESTIMATES: The current Federal (Corps) cost estimate of $51,066,000 is an increase of $5,000 over the latest estimate of $51,061,000 presented to Congress (FY 1995). This change includes the following items.

Item	Amount
Price Escalation on Construction Features	($ 7,000)
Schedule changes	12,000
Total	$ 5,000

STATUS OF ENVIRONMENTAL IMPACT STATEMENT: The Final Environmental Impact Statement and Section 404(b)(1) report were filed with EPA on 22 September 1991.

OTHER INFORMATION: Funds to initiate preconstruction engineering and design were appropriated in FY 1989. Funds to initiate construction were appropriated in FY 1992. Phase I of the project was completed in August 1993. The scheduled completion date of December 1997 is a slippage from the latest completion date of September 1995 last presented to Congress due to sponsor delays in awarding the Phase II contract.

APPROPRIATION: Construction, General - Channels and Harbors (Navigation)

PROJECT: Pascagoula Harbor, Mississippi (Continuing)

LOCATION: Pascagoula Harbor project is located on the Gulf Coast, at Pascagoula, in Jackson County, Mississippi, about 100 miles east of New Orleans, Louisiana, and 32 miles west of the entrance to Mobile Harbor, Alabama. The deep draft ship channel runs southward from Pascagoula through Mississippi Sound into deep water in the Gulf of Mexico.

DESCRIPTION: The proposed plan of improvement is to widen the existing Gulf Channel from 40 feet deep and 350 feet wide to 44 feet deep and 450 feet wide for 5 miles; relocate Horn Island Pass 300 feet to the west and deepen and widen the channel from 40 feet deep and 350 feet wide to 44 feet deep and 600 feet wide for 1.5 miles; deepen the Main Harbor channel from 38 feet to 42 feet at the existing width of 350 feet for 2 miles; deepen the Pascagoula River channel from 38 feet to 39 feet at the existing width of 350 feet for 5 miles; deepen and widen the Bayou Casotte channel from 38 feet by 225 feet wide to 42 feet by 300 feet wide for 4.5 miles; and construct a new turning basin 42 feet deep at the mouth of the Bayou Casotte channel.

Phase I, which is a separable element of the project, consists of constructing a new turning basin at the present project depth of 38 feet deep at the mouth of Bayou Casotte, widening the Gulf approach channel to 450 feet and the Horn Island Pass Channel to 600 feet, and relocating the Horn Island Pass Channel 300 feet to the west. Both channel segments will remain at existing depth of 40 feet. The existing channel through the Pass will become a deposition basin, and another deposition basin will be constructed in the transition area into the sound channel.

Additional phases of the authorized project will be constructed in justifiable increments, as related to priority of needs and the non-federal sponsor's willingness and capability to participate. The additional phases of work are currently unprogrammed.

AUTHORIZATION: Water Resources Development Act of 1986.

REMAINING BENEFIT-REMAINING COST RATIO: 1.3 at 8 1/4 percent.

TOTAL BENEFIT-COST RATIO: 1.1 at 8 1/4 percent.

BASIS OF BENEFIT-COST RATIO: Benefits are from the General Design Memorandum approved in June 1992 at October 1991 price levels.

SUMMARIZED FINANCIAL DATA

Estimated Appropriation Requirements (CofE)			$ 35,170,000
Programmed Construction		$12,060,000	
Unprogrammed Construction		23,110,000	
Estimated Appropriation Requirement (U.S.C.G)			66,000
Programmed Construction		20,000	
Unprogrammed Construction		46,000	
Estimated Total Appropriation Requirement			35,236,000
Programmed Construction		12,080,000	
Unprogrammed Construction		23,156,000	
Future Non-Federal Reimbursement			4,689,000
Programmed Construction		1,608,000	
Unprogrammed Construction		3,081,000	
Estimated Federal Cost (Ultimate)(CofE)			30,481,000
Programmed Construction		10,452,000	
Unprogrammed Construction		20,029,000	
Estimated Non-Federal Cost			$16,853,000
Programmed Construction		5,628,000	
Cash contributions	4,020,000		
Other Costs	0		
Reimbursements	1,608,000		
Unprogrammed Construction		11,225,000	
Cash Contributions	7,704,000		
Other Costs	440,000		
Reimbursements	3,081,000		
Total Estimated Programmed Construction Cost			16,100,000
Total Estimated Unprogrammed Construction Cost			31,300,000
Total Estimated Cost			47,400,000

		ACCUM PCT OF EST FED COST
Allocation to 30 September 1994	$ 2,514,000	
Conference Allowance for FY 1995	8,000,000	
Allocation For FY 1995	6,734,000 1/	
Allocation Through FY 1995	9,248,000	26
Allocation Requested for FY 1996	2,812,000	34
Programmed Balance to Complete after FY 1996	0	
Unprogrammed Balance to Complete after FY 1996	23,110,000	

STATUS (1 Jan 1995)	PERCENT COMPLETE	PHYSICAL COMPLETION
Phase I	15	Sep 1996
Remainder	0	Unprogrammed
Entire Project	0	Sep 1996 2/

1/ Reflects $1,266,000 reduction assigned as savings and slippage.

2/ For programmed work only; remaining work is unprogrammed pending a decision to construct these features.

Division: South Atlantic District: Mobile Pascagoula Harbor, MS

6 February 1995

PHYSICAL DATA

CHANNELS: Widen the Gulf Approach Channel from 350 feet to 450 feet at existing depth of 40 feet. Relocate Horn Island Pass 300 feet to the west and widen the channel from 350 feet to 600 feet at existing depth of 40 feet. Deepen the Main Harbor Channel from 38 feet to 42 feet at existing width of 350 feet. Deepen the Pascagoula River Channel from 38 feet to 39 feet at existing width of 350 feet. Deepen and widen Bayou Casotte Channel from 38 feet by 225 feet to 42 feet by 300 feet. Construct a new turning basin to a depth of 42 feet.

JUSTIFICATION: Pascagoula Harbor is located on the Gulf Coast at Pascagoula, Mississippi, in Jackson County, Mississippi. This deep-draft ship channel has a total length of 17.5 miles from the Pascagoula Inner Harbor to deep water in the Gulf of Mexico. It is essential to the economy of the state and to Jackson County, the state's most industrialized county. The Pascagoula River channel serves Ingalls Shipbuilding, a grain elevator, the Navy Homeport and numerous lumber and breakbulk shippers. Bayou Casotte harbor serves larger vessels and needs relief from hazardous, congested conditions. The Bayou Casotte channel serves the Chevron refinery which is their largest heavy crude cracking plant in the U.S. This refinery imports 17.3 million tons of crude oil annually and ships a substantial portion of this amount in finished products by water. The channel also serves First Chemical, Mississippi Chemical, NuSouth, Inc. (chemical), and numerous breakbulk shippers from port facilities in the inner harbor. Extended delays occur when large crude tankers, dry bulk carriers, LASH, RoRo and smaller tankers must wait for daylight to cross the bar, to turn, and to pass volatile discharge docks. In addition, volatile finished chemical products docks located in the inner harbor demand errorless pilotage to turn at a small turning basin at the upper end of the channel. Two major marine accidents have occurred recently. There was an explosion and fire of a barge at the Chevron products dock in 1986 which emphasizes the need for emergency departure of the crude tankers. In addition, a 980-foot long LASH vessel in 1988 lost tug support while passing these same docks and rammed a port facility pier to the immediate north of these docks. Widening the pass and bar and providing a new turning basin at the mouth of Bayou Casotte inner harbor generates the benefits for Phase I in the amount of $2,491,200 annually. Projected future vessel fleet sizes are expected to remain the same as the existing fleet. Foreign imports which will benefit from Phase I channel improvements are expected to remain constant at 17.3 million tons; foreign exports have currently reached 2.1 million tons and are expected to remain relatively constant over the project life.

Suitable new work and maintenance dredged material from widening Horn Island Pass and the Gulf approach channel will be placed in an existing open water disposal area and in a nearshore littoral zone in the 15-foot and 30-foot depth contours on the east end of Horn Island. The remainder of the material will be placed in the offshore designated Ocean Dredged Material Disposal Site (ODMDS) located approximately 2 miles south southeast of Horn Island. Phase I material will be placed in an approved disposal area in the Gulf of Mexico. Dredged material resulting from construction of the new turning basin at Bayou Casotte will also be placed in the ODMDS. Material dredged during maintenance of the new turning basin will be placed in the existing Greenwood Island upland disposal area. The average annual benefits for this project are $6,695,500 all for commercial navigation.

FISCAL YEAR 1996: The requested amount will be applied as follows:

Complete Dredging Contracts	$ 2,122,000
Complete Environmental Monitoring	190,000
Complete Planning, Engineering and Design	100,000
Construction Management	400,000
Total	$ 2,812,000

NON-FEDERAL COST: In accordance with the cost sharing and financing concepts reflected in the Water Resources Development Act of 1986, the non-Federal sponsor must comply with the requirements listed below.

Requirements of Local Cooperation	Payments During Construction and Reimbursements	Annual Operation, Maintenance, and Replacement Costs
Separable Element Phase I		
Pay 25% of the cost allocated to general navigation facilities during construction.	$ 4,020,000	$ 0
Reimburse an additional 10 percent of the costs allocated to general navigation facilities within a period of 30 years following completion of construction.	1,608,000	
Separable Element Remainder of Project.		
Pay 25 percent of the costs allocated to general navigation facilities during construction.	7,704,000	
Pay 100 percent of the cost allocated to berthing area dredging (without credit).	440,000	31,000
Reimburse an additional 10 percent of the costs allocated to general investigation facilities within a period of 30 years following completion of construction.	3,081,000	
Total Non-Federal Cost	16,853,000	31,000

NON-FEDERAL COSTS (Continued): The non-Federal sponsor has agreed to make all required payments concurrently with project construction and reimburse its share of construction costs within a period of 30 years following completion of construction.

STATUS OF LOCAL COOPERATION: The local sponsor is the Jackson County Port Authority at Pascagoula, Mississippi. The Project Cooperation Agreement was signed in May 1994. The sponsor has existing disposal areas that will be provided for the project and may be used to fulfill part of the sponsor's local cooperation requirements.

The Jackson County Port Authority (JCPA) provided a Letter of Intent on 13 August 1991 to sponsor the Phase I construction. The sponsor has financed its portion of the project with the sale of port bonds.

COMPARISON OF FEDERAL COST ESTIMATE: The current Federal (Corps) cost estimate of $35,170,000 is a decrease of $1,023,000 from the latest estimate of ($36,193,000) presented to Congress (FY 1995). This change includes the following items:

Item	Amount
Price Escalation on Construction Features	$ 17,000
Design Changes	-1,040,000
TOTAL	$ -1,023,000

STATUS OF ENVIRONMENTAL IMPACT STATEMENT: The Final Environmental Impact Statement was filed with the Environmental Protection Agency on 12 July 1985.

OTHER INFORMATION: Funds to initiate preconstruction engineering and design were appropriated in FY 1987. Funds to initiate construction were appropriated in FY 1994. There are $695,000 of Fish and Wildlife Facilities scheduled to be constructed with the Phase I portion of the project.

SUMMARIZED FINANCIAL DATA FOR PHASE I:

Estimated Appropriation Requirements (CofE)		$12,060,000
Estimated Appropriation Requirements (U.S.C.G.)		20,000
Estimated Total Appropriation Requirements		12,080,000
Future non-Federal Reimbursement		1,608,000
Estimated Federal Cost (Ultimate)(CofE)		10,452,000
Estimated Non-Federal Cost		5,628,000
Cash Contributions	$4,020,000	
Other Costs	0	
Reimbursements	1,608,000	
Total Estimated Project Cost		$16,100,000

Remaining Benefit-Remaining Cost Ratio: 1.3 to 1 at 8 1/4 percent.

Total Benefit-Cost Ratio: 1.1 to 1 at 8 1/4 percent.

APPROPRIATION TITLE: Construction, General - Channels and Harbors (Navigation)

PROJECT: AIWW - Replacement of Federal Highway Bridges, North Carolina (Continuing)

LOCATION: The two remaining federally owned, obsolete swing span bridges over the Atlantic Intracoastal Waterway are at Hobucken, and Fairfield, North Carolina. The high level Walter B. Jones Bridge (formerly Wilkerson Creek) opened to traffic on 31 July 1981, the high level Joseph P. Knapp Bridge (formerly Coinjock) opened to traffic on 1 July 1986 and the new high level Core Creek Bridge opened to traffic on 5 October 1993.

DESCRIPTION: The project provides for replacing five existing low level bridges with fixed span 2-lane bridges, except the Joseph P. Knapp Bridge which has 4-lanes. The new bridges will have a vertical clearance of 65 feet at mean high water. All work is programmed.

AUTHORIZATION: River and Harbor Act of 1970, Water Resources Development Act of 1976, and Water Resources Development Act of 1986.

REMAINING BENEFIT - REMAINING COST RATIO: Not applicable.

TOTAL BENEFIT - COST RATIO: Not applicable.

INITIAL BENEFIT - COST RATIO: Not applicable.

BASIS OF BENEFIT - COST RATIO: Not applicable.

SUMMARIZED FINANCIAL DATA		STATUS (1 Jan 1995)	PERCENT COMPLETE	PHYSICAL COMPLETION SCHEDULE
Estimated Federal Cost	$80,600,000	Walter B. Jones	100	Sep 1983
		Joseph P. Knapp	100	Jun 1987
Estimated Non-Federal Cost	$ 0	Core Creek	100	Mar 1994
		Hobucken	14	Being determined
Total Estimated Project Cost	$80,600,000	Fairfield	6	Being determined
		Entire Project	49	Being determined

SUMMARIZED FINANCIAL DATA (Continued)		ACCUM. PCT. OF EST. FED. COST
Allocations to 30 September 1994	$39,267,000	
Conference Allowance for FY 1995	4,400,000	
Allocation for FY 1995	3,704,000 1/	
Allocations through FY 1995	42,971,000	53
Allocation Requested for FY 1996	6,500,000	61
Programmed Balance to Complete After FY 1996	31,129,000	
Unprogrammed Balance to Complete After FY 1996	0	

1/ Reflects $696,000 reduction for savings and slippage, and $350,000 in programmed carryover into FY 96.

PHYSICAL DATA

Lands and Damages - 723 acres
Bridges (Walter B. Jones, Joseph P. Knapp, Core Creek, Hobucken, and Fairfield)
Type - Fixed span, 2-lane (Except Joseph P. Knapp which is 4-lane).
Vertical Clearance - 65 feet at mean high water
Horizontal Navigation Opening - 90 feet minimum

JUSTIFICATION: The two remaining bridges to be replaced were constructed during the period from 1930 to 1935, and are now substandard with relation to current criteria recommended by the Federal Highway Administration, the N.C. Department of Transportation and Highway Safety (NCDOTHS), and the American Association of State Highway and Transportation Officials (AASHTO). Both of the remaining bridges to be replaced are overstressed when applying the current user loading and when considering the present deteriorated state of the structures and loss of section due to corrosion. Overstress ranges up to 80%. The Hobucken and Fairfield Bridges are restricted to one-lane traffic, are posted for maximum loads of 10, and 12 tons for single vehicles and have clear roadway widths of only 18 and 20 feet, respectively. The bridges have vertical clearances of only 13 feet 6 inches and are difficult to traverse, especially for bus and truck traffic. During the period January 1971 to September 1994, there were 32 accidents at Hobucken Bridge, and 19 at Fairfield Bridge involving vehicles and tugs striking the bridge structures. Although remedial repairs are being made continuously, this work can no longer render the bridges safe. These conditions, together with the economics of operation and maintenance, underscore the urgent need for the immediate replacement of the bridges.

FISCAL YEAR 1996: The total program amount, including the requested and programmed carryover amounts of $6,500,000 and $350,000, respectively, will be applied as follows:

Complete Lands and Damages for Core Creek Bridge	$ 50,000
Initiate Land Acquisition for Fairfield Bridge	306,000
Continue Construction of Hobucken Bridge	5,380,000
Planning, Engineering and Design for Hobucken Bridge	30,000
Construction Management for Hobucken Bridge	440,000
Planning, Engineering and Design for Fairfield Bridge	644,000
Total	$6,850,000

NON-FEDERAL COSTS: In accordance with the authorizing legislation, the State of North Carolina must accept ownership responsibilities for the bridges upon completion, including all costs of operation, maintenance, and replacement as listed below:

	Annual Operation, Maintenance Repair, Rehabilitation and Replacement Costs
Hobucken Bridge	$10,000
Fairfield Bridge	10,000

STATUS OF LOCAL COOPERATION: The State of North Carolina, by resolutions adopted 2 August 1974 and 7 February 1975, reaffirmed its intention of providing the terms of local cooperation with the exception of the 25 percent cost sharing. The Water Resources Development Act of 1976 modified the terms of local cooperation to delete the non-Federal cost sharing requirement for the Walter B. Jones and Joseph P. Knapp Bridges. The Water Resources Development Act of 1986 modified the terms of local cooperation to delete the non-Federal cost-sharing requirement for the Core Creek, Hobucken, and Fairfield Bridges. A local assurance agreement pursuant to Section 221 of the River and Harbor and Flood Control Act of 1970 (PL 91-611) was signed by the Secretary of the Army on 28 July 1977 for the Walter B. Jones Bridge and on 10 August 1979 for the Joseph P. Knapp Bridge. The Section 221 Agreement for the Joseph P. Knapp Bridge was amended on 1 February 1983 to assure that State highway improvements would proceed concurrently with the bridge construction. These improvements have been completed.

STATUS OF LOCAL COOPERATION (Continued):

A project cooperation agreement was executed in December 1990 for the Core Creek Bridge and in December 1993 for the Hobucken Bridge. The project cooperation agreement for Fairfield Bridge is scheduled for execution in December 1995.

COMPARISON OF FEDERAL COST ESTIMATES: The current Federal (Corps) cost estimate of $80,600,000 is a decrease of $2,100,000 from the latest estimate ($82,700,000) presented to Congress (FY 1995). This change includes the following items.

Item	Amount
Price Escalation on Construction Features	-$ 776,000
Design Changes	- 1,334,000
Price Escalation on Real Estate	10,000
Total	-$2,100,000

STATUS OF ENVIRONMENTAL IMPACT STATEMENT: The final EIS for all five bridges was filed with CEQ on 16 November 1970. During engineering and design, each bridge is being evaluated separately and updated EIS's were filed or are scheduled to be filed with the Environmental Protection Agency as follows:

	Schedule to EPA	
	Draft	Final
Original	-	Nov 1970
Updated		
Walter B. Jones	May 1974	Dec 1975
Joseph P. Knapp	Aug 1980	Mar 1981
Core Creek	Aug 1989	Jul 1990
Hobucken	Mar 1992	Jun 1992
Fairfield	Sep 1993	Jun 1994

OTHER INFORMATION: Funds to initiate preconstruction planning were appropriated in FY 1973. Funds to initiate construction were appropriated in FY 1974.

Walter B. Jones Bridge

SUMMARIZED FINANCIAL DATA FOR PROGRAMMED SEPARABLE ELEMENTS:

Estimated Federal Cost	$10,692,000
Estimated Non-Federal Cost	0
Total Estimated Project Cost	$10,692,000

REMAINING BENEFIT-REMAINING COST RATIO FOR PROGRAMMED SEPARABLE ELEMENTS: Not Applicable

TOTAL BENEFIT-COST RATIO FOR PROGRAMMED SEPARABLE ELEMENTS: Not Applicable

Joseph P. Knapp Bridge

SUMMARIZED FINANCIAL DATA FOR PROGRAMMED SEPARABLE ELEMENTS:

Estimated Federal Cost	$11,826,000
Estimated Non-Federal Cost	0
Total Estimated Project Cost	$11,826,000

REMAINING BENEFIT-REMAINING COST RATIO FOR PROGRAMMED SEPARABLE ELEMENTS: Not Applicable.

TOTAL BENEFIT-COST RATIO FOR PROGRAMMED SEPARABLE ELEMENTS: Not Applicable.

Core Creek Bridge

SUMMARIZED FINANCIAL DATA FOR PROGRAMMED SEPARABLE ELEMENTS:

Estimated Federal Cost	$13,700,000
Estimated Non-Federal Cost	0
Total Estimated Project Cost	$13,700,000

REMAINING BENEFIT-REMAINING COST RATIO FOR PROGRAMMED SEPARABLE ELEMENTS: Not Applicable.

TOTAL BENEFIT-COST RATIO FOR PROGRAMMED SEPARABLE ELEMENTS: Not Applicable.

Hobucken Bridge

SUMMARIZED FINANCIAL DATA FOR PROGRAMMED SEPARABLE ELEMENTS:

Estimated Federal Cost	$17,900,000
Estimated Non-Federal Cost	0
Total Estimated Project Cost	$17,900,000

REMAINING BENEFIT-REMAINING COST RATIO FOR PROGRAMMED SEPARABLE ELEMENTS: Not Applicable.

TOTAL BENEFIT-COST RATIO FOR PROGRAMMED SEPARABLE ELEMENTS: Not Applicable.

Fairfield Bridge

SUMMARIZED FINANCIAL DATA FOR PROGRAMMED SEPARABLE ELEMENTS:

Estimated Federal Cost	$26,482,000
Estimated Non-Federal Cost	0
Total Estimated Project Cost	$26,482,000

REMAINING BENEFIT-REMAINING COST RATIO FOR PROGRAMMED SEPARABLE ELEMENTS: Not Applicable.

TOTAL BENEFIT-COST RATIO FOR PROGRAMMED SEPARABLE ELEMENTS: Not Applicable.

APPROPRIATION TITLE: Construction, General - Beach Erosion Control

PROJECT: Lee County, Florida (Continuing)

LOCATION: Lee County is located on the lower Gulf Coast of Florida, about 90 miles south of the entrance to Tampa Bay.

DESCRIPTION: The Lee County Beach Erosion Control project is composed of three island segments; Captiva, Estero, and Gasparilla. The project was authorized under the provisions of Section 201 of the Flood Control Act of 1965 by Senate Resolution dated 17 December 1970 and House Resolution dated 15 December 1970. The project provides for work on three island segments as follows: Captiva Island, beach restoration along 4.7 miles; Estero Island, beach restoration along 4.6 miles and a 600-foot terminal groin; Gasparilla Island, beach restoration along 2.7 miles, 2,400 feet of revetment and a 500-foot terminal groin; and periodic nourishment of the restored beaches as needed, with Federal participation limited to the first 10 years of project life. The project consists of a beach fill width of 50 feet at +4 feet elevation relative to mean low water. Placement of 2.9 million cubic yards of material would be required for beach restoration. The project was authorized for separable construction of each island segment.

The 4.7 mile project segment on Captiva Island was completed by the non-Federal project sponsor under authority of a Section 215 agreement in 1989. The Estero and Gasparilla Island project segments have been authorized but not constructed for a number of years. Fiscal Year 1996 funds will be used to complete a reconnaissance study to determine if the Estero and Gasparilla Island project segments remain justified and meet current design criteria. The reconnaissance study would be followed by a resumption of preconstruction, engineering and design for the project. The Lee County Board of Commissioners by resolution number 90-05-41 dated 23 May 1990 indicated the County's desire to act as the non-Federal project sponsor for the Estero and Gasparilla Island project segments. The anticipated project outputs appear to be in accord with current Department of the Army policy. The reconnaissance study is scheduled to be completed in September 1996, which is 12 months after initiating the study. Construction of the Estero Island and Gasparilla Island segments is currently unprogrammed.

AUTHORIZATION: The River and Harbor Act of 1970.

REMAINING BENEFIT-REMAINING COST RATIO: 1.3 to 1 at 8 percent for Estero Island and 1.3 to 1 at 8 percent at Gasparilla Island.

TOTAL BENEFIT-COST RATIO: 1.7 to 1 at 8 1/2 percent.

INITIAL BENEFIT-COST RATIO: 1.6 to 1 at 8 1/2 percent.

BASIS OF BENEFIT-COST RATIO: Benefits are based upon the Captiva Island General Design Memorandum completed in July 1989 at January 1989 price levels.

SUMMARIZED FINANCIAL DATA:				ACCUM. PCT. OF EST. FED COST
Estimated Federal Cost			$ 8,200,000	
Programmed Construction		2,651,000		
Initial Construction	2,177,000			
Periodic Nourishment	474,000			
Unprogrammed Construction		5,549,000		
Initial Construction	3,274,000			
Periodic Nourishment	2,275,000			
Estimated Non-Federal Cost			$29,700,000	
Programmed Construction		12,337,000		
Initial Construction	9,850,000			
Cash Contributions 9,850,000				
Periodic Nourishment	2,487,000			
Cash Contributions 2,487,000				
Estimated Non-Federal Cost			$17,363,000	
Unprogrammed Construction				
Initial Construction	8,306,000			
Cash Contributions 8,306,000				
Periodic Nourishment	9,057,000			
Cash Contributions 9,057,000				

STATUS (1 Jan 1995)	PERCENT COMPLETE	PHYSICAL COMPLETION SCHEDULE
Initial Fill (Captiva)	100	Apr 1989
Periodic Nourishment	0	Sep 1996
Entire Project		Being determined

PHYSICAL DATA

Beach Nourishment (Captiva)	
Initial Fill	1,418,000 cubic yards
Period Nourishment	282,000 cubic yards
Beach Nourishment (Gasparilla)	
Initial Fill	700,000 cubic yards
Periodic Nourishment	60,000 cubic yards
Beach Nourishment (Estero)	
Initial Fill	320,000 cubic yards
Periodic Nourishment	120,000 cubic yards

SUMMARIZED FINANCIAL DATA (Continued)

Total Estimated Programmed Construction Cost		14,988,000		
Initial Construction	12,027,000			
Periodic Nourishment	2,961,000			
Total Estimated Unprogrammed Construction Cost		22,912,000		
Initial Construction	11,580,000			
Periodic Nourishment	11,332,000			
Total Estimated Construction Cost		37,900,000		
Initial Construction	23,607,000			
Periodic Nourishment	14,293,000			
Allocations to 30 September 1994		1,916,000		
Conference Allowance for FY 1995		500,000		
Allocation for FY 1995		408,000	1/	
Allocations through FY 1995		2,324,000		28
Allocation Requested for FY 1996		600,000		36
Programmed Balance to Complete after FY 1996		634,000		
Unprogrammed Balance to Complete after FY 1996		4,642,000		

1/ Reflects $79,000 as savings and slippage and $13,000 reprogrammed from the project.

JUSTIFICATION: The Gulf shore of Captiva Island is about 5 miles long and varies in width from about 200 feet near the south end to about 2,000 feet between the middle and the north end. Natural ground elevations are generally under 10 feet. The island is well developed as a resort and residential area. Erosion of the natural protective beach leaves upland property vulnerable to severe damage during relatively minor storms. Due to the long-term erosion, the County roadway that served as an evacuation route became endangered and was intermittently undermined by storms. The project will provide needed stability of the beaches and protection for shorefront development and the County road.

On Gasparilla Island, the project would protect 703 front row structures with a 1989 value of $29 million. State Road 771 traverses the project areas and is designated as a hurricane evacuation route. The road is threatened with closure during storm events. Recent storm events have caused serious erosion to the extent that upland improvements are now threatened. Recent events include Hurricane Floyd in 1987, tropical storms Keith (1988) and Marco (1990), and

JUSTIFICATION (Continued):

Hurricane Andrew (1992). Project construction is needed to reduce the threat of damages from hurricanes and storms. Average annual benefits for Captiva Island are as follows:

Annual Benefits	Amount
Shoreline Protection (Beach Erosion)	
Storm Damage Prevention	$1,162,000
Recreation	538,000
Total	$1,700,000

FISCAL YEAR 1996: The requested amount will be applied as follows:

Renourishment (Captiva Island)	$434,000
Planning, Engineering, and Design	
Gasparilla Island	71,000
Estero Island	46,000
Construction Management (Captiva Island)	49,000
Total	$600,000

NON-FEDERAL COST: In accordance with the cost sharing and financing concepts reflected in the Water Resources Development Act of 1986, the non-Federal sponsor must comply with the requirements listed below.

Requirements of Local Cooperation	Payments During Construction and Reimbursements	Annual Operation, Maintenance, Repair, Repair, Rehabilitation, and Replacement Costs
Pay 73.60 percent of the costs associated with the nourishment and renourishment of the project	$ 11,195,000	
Total Non-Federal Costs	$ 11,195,000	

The non-Federal sponsor constructed the project at Captiva Island and requested subsequent Federal reimbursement under Section 215 authority.

STATUS OF LOCAL COOPERATION: The Captiva Erosion Prevention District is the local sponsor for the Captiva Island segment. A Section 215 Agreement which allows for the Federal reimbursement of the 2.7-mile Captiva Island portion was executed on 1 September 1988.

COMPARISON OF FEDERAL COST ESTIMATES: The current Federal (Corps) cost estimate of $8,200,000 is a increase of $100,000 from the latest estimate ($8,100,000) presented to Congress (FY 1995). This change includes the following items:

Item	Amount
Price Level Increase on Construction Features	$ 90,000
Design Changes	$ 10,000
Total	$100,000

STATUS OF ENVIRONMENTAL IMPACT STATEMENT: An Environmental Assessment and Section 404 Evaluation report were completed in January 1989 for the Captiva segment.

OTHER INFORMATION: The project sponsor completed the Captiva Island nourishment in April 1989 and has indicated that periodic nourishment is scheduled for 1996, for which Section 215 cost sharing may be requested. Funds for reimbursement of the April 1989 Captiva Island nourishment were included in the FY 1994 budget. Upon completion of the project audit, the sponsor was reimbursed in FY 1994.

APPROPRIATION TITLE: Construction, General - Beach Erosion Control

PROJECT: Martin County, Florida (Continuing)

LOCATION: Martin County is located about 100 miles north of Miami and due east of Lake Okeechbee. The Martin County Atlantic coastline is located in the southeastern section of Florida with the Indian River Lagoon to the west, the Atlantic Ocean to the east, St. Lucie Inlet to the south, and St. Lucie County to the North. The beach control project itself is located on Hutchinson Island and stretches from the St. Lucie/Martin County line to the southern boundary of Stuart Public Beach Park.

DESCRIPTION: The recommended plan of improvement for Martin County provides for restoration of a protective beach along 3.75 miles of shoreline. Initial restoration of the project shoreline would require 1,297,000 cubic yards of material. The borrow area for initial and future renourishments is located within a shoal area about 3,000 feet offshore of the southern project area. The restored beach will require approximately 589,600 cubic yards of material every 11 years to maintain project dimensions. The plan includes restoration of the primary dune as needed to an elevation of 12.5 feet above mean sea level and a top width of 20 feet as well as a 35-foot wide protective berm at an elevation of 8.0 feet mean sea level. The recommended plan was designed to reduce associated environmental impacts to minimum levels. Of primary importance is the impact of project construction on sea turtle nesting. In order to avoid these impacts, the construction and future nourishments of the Martin County shore protection project is scheduled to occur between the November 1st and April 15th.

AUTHORIZATION: Water Resources Development Act of 1990.

REMAINING BENEFIT-REMAINING COST RATIO: 5.0 to 1 at 8 percent

TOTAL BENEFIT-COST RATIO: 5.0 to 1 at 8 percent

INITIAL BENEFIT-COST RATIO: 5.0 to 1 at 8 percent (FY 1995)

BASIS OF BENEFIT-COST RATIO: Benefits are from the Martin County, Florida General Design Memorandum dated December 1993 (revised June 1994) at December 1993 price levels.

SUMMARIZED FINANCIAL DATA:				ACCUM. PCT. OF EST. FED COST	STATUS (1 Jan 95)	PERCENT COMPLETE	PHYSICAL COMPLETION SCHEDULE
Estimated Federal Cost			$25,600,000		Beach Replenishment		
Initial Construction		4,986,000			Initial Fill	0	Apr 1996
Periodic Nourishment		20,614,000			Periodic Nourishment	0	Being deterrmined
Estimated Non-Federal Cost			$30,300,000		Entire Project	0	Being deterrmined
Initial Construction		6,680,000					
Cash Contributions	6,680,000						
Other Costs	0						
Periodic Nourishment		23,620,000					
Cash Contributions	23,620,000						
Other Costs	0						
Total Estimated Project Cost			55,900,000				
Initial Construction		11,666,000					
Periodic Nourishment		44,234,000					
Allocations to 30 September 1994			$ 886,000				
Conference Allowance for FY 1995			360,000				
Allocation for FY 1995			264,000 1/				
Allocations through FY 1995			1,192,000	4			
Allocation Requested for FY 1996			3,202,000	17			
Programmed Balance to Complete after FY 1996			21,206,000				
Unprogrammed Balance to Complete after FY 1996			0				

1/ Reflects $58,000 reduction for savings and slippage and $38,000 reprogrammed from the project.

PHYSICAL DATA

Initial Beach Fill	1,297,500 cubic yards
Future Periodic Nourishment	589,600 cubic yards every 11 years

Division: South Atlantic District: Jacksonville Martin County, FL

JUSTIFICATION: Martin County is a rapidly developing region of southern Florida with an estimated 1985 population of 80,000. The population is expected to grow to 165,000 by the year 2020. Economic development depends heavily upon tourism, with other major industries including aerospace, plastics, and agriculture. The majority of the development on Hutchinson Island within the previous 10 years consists of multi-unit residential structures. A feasibility report was completed in September 1985. A General Design Memorandum (GDM) with an Environmental Assessment was approved June 1994. The recommended plan stated in the GDM, estimated to cost $55,900,000 with an estimated Federal cost of $25,600,000 and an estimated non-Federal cost of $30,300,000, provides for initial beach fill and periodic nourishment for 3.75 miles beginning at the St. Lucie\Martin County and proceeding south on Hutchinson Island. The plan includes restoration of the primary dune and a 35-foot protective beach to provide storm damage protection along the project area. The average annual benefits amount to $5,674,000. The benefit cost ratio is 5.0 to 1. The non-Federal sponsor is the Martin County Board of County Commissioners who verified their support by referendum at their 26 March 1991 meeting.

The project is authorized for construction by the Water Resources Development Act of 1990. The cost sharing requirements as stated in the GDM call for Martin County Board of County Commissioners to pay 53.41 percent of all costs associated with the initial construction and future nourishments of the project, presently estimated at $30,300,000. The annual reduction of damages to development based on current shorefront development is estimated to be $4.972 million. Average annual benefits for the recommended plan are as follows:

Annual Benefits	Amount
Storm Damage Prevention	4,972,000
Recreation Benefits	702,000
Total	5,674,000

FISCAL YEAR 1996: The requested amount will be applied as follows:

Initiate Lands and Damages	$ 194,000
Initiate Monitoring of Fish and Wildlife Facilities	76,000
Initiate Construction of Beach Replenishment	3,271,000
Planning, Engineering, and Design	(610,000)
Construction Management	271,000
Total	$ 3,202,000

NON-FEDERAL COST: In accordance with the cost-sharing concepts reflected in the Martin County, Florida General Design Memorandum dated December 1993 (Revised June 1994).

Requirements of Local Cooperation	Payments During Construction and Reimbursements	Annual Operation, Maintenance, Repair, Rehabilitation, and Replacement Costs
Provide lands, easements, rights-of-way, relocations, and dredged material disposal areas.	$ 223,000	
Pay 53.41 percent of the costs allocated to initial fill.	6,457,000	
Pay 53.41 percent of the costs allocated to periodic renourishment of the project shoreline.	23,620,000	
Total	$30,300,000	

STATUS OF LOCAL COOPERATION: By letter of 26 March 1991, the sponsor, Martin County, expressed their interests in continuing an agreement with the Federal government to extend the beach nourishment of the project. A Project Cooperation Agreement is scheduled for execution in June 1995.

COMPARISON OF FEDERAL COST ESTIMATES: The current Federal (Corps) cost estimate of $25,600,000 is a decrease of $18,000,000 from the latest estimate $43,600,000 presented to Congress (FY 1995). This change includes the following:

Item	Amount
Price Escalation on Construction Features	$ -8,221,000
Design Changes	-12,478,000
Schedule Changes	2,699,000
Total	$ -18,000,000

STATUS OF ENVIRONMENTAL IMPACT STATEMENT AND COMPLIANCE WITH CLEAN WATER ACT: A final EIS was prepared and included in the Feasibility Report dated September 1985 (revised June 1986). An Environmental Assessment and FONSI (Finding-of-No-Significant-Impact) are included in the General Design Memorandum dated December 1993 (Revised June 1994).

OTHER INFORMATION: Funds to initiate preconstruction, engineering, and design were appropriated in Fiscal Year 1992. Funds to initiate construction were appropriated in Fiscal Year 1995.

APPROPRIATION TITLE: Construction, General - Beach Erosion Control

PROJECT: Sarasota County, Florida (Continuing)

LOCATION: Sarasota County is located along the lower west coast of Florida approximately 55 miles southwest of Tampa.

DESCRIPTION: The project provides for a protective beach along 12,600 feet of shoreline on central Longboat Key and 17,700 feet on Manasota Key in the vicinity of Venice, periodic nourishment of both areas and 8,400 feet of existing shore south of Venice. Only the Venice Beach segment is programmed at this time. Longboat Key is not programmed.

AUTHORIZATION: Water Resources Development Act of 1986.

REMAINING BENEFIT-REMAINING COST RATIO: 1.3 to 1 at 8-3/4 percent.

TOTAL BENEFIT-COST RATIO: 1.3 to 1 at 8-3/4 percent.

INITIAL BENEFIT-COST RATIO: 1.3 to 1 at 8-3/4 percent.

BASIS OF BENEFIT-COST RATIO: Benefits are from the latest available evaluation for the General Design Memorandum submitted in August 1990 at May 1990 price levels.

SUMMARIZED FINANCIAL DATA				ACCUM. PCT. OF EST. FED COST	STATUS (1 Jan 1995)	PERCENT COMPLETE	PHYSICAL COMPLETION SCHEDULE
Estimated Federal Cost			55,200,000		Initial Fill:		
					Venice	20	Jul 1996
Initial Construction		15,067,000			Longboat	0	INDEFINITE
Periodic Construction		40,133,000					
Estimated Non-Federal Cost			26,300,000		Nourishment:		
					Venice		Being determined
Initial Construction		9,699,000			Longboat	0	INDEFINITE
Cash Contributions	9,675,000						
Other Costs (LANDS)	24,000						
					Entire Project	20	Being determined

Division: South Atlantic District: Jacksonville Sarasota County, FL

SUMMARIZED FINANCIAL DATA (Continued)

			ACCUM. PCT. OF EST. FED COST
Periodic Nourishment		16,601,000	
Cash Contributions	16,601,000		
Other Costs		0	
Total Estimated Project Cost		81,500,000	
Initial Construction	24,766,000		
Periodic Nourishment	56,734,000		
Allocations to 30 September FY 1994		3,055,000	
Conference Allowance for FY 1995		0	
Allocation for FY 1995		4,450,000 1/	
Allocations through FY 1995		7,505,000	14
Allocations Requested for FY 1996		4,400,000	22
Programmed Balance to Complete after FY 1996		41,362,000	
Unprogrammed Balance to Complete after FY 1996		1,933,000	

1/ Reflects $4,450,000 reprogrammed to the project.

PHYSICAL DATA

Placement of Initial Beach Fill	
Venice	2,048,000 cubic yards
Longboat	1,165,000 cubic yards
Periodic Nourishment	
Venice	2,637,500 cubic yards
Longboat	612,500 cubic yards

JUSTIFICATION: The combined effects of wind, waves, and tides, particularly during storm conditions, has resulted in lowering beach profiles and recession of the shoreline. The net result has been damage to public and private properties, including houses and protective structures, such as seawalls and bulkheads. The primary purpose of the project is to prevent physical damages. The project provides protection to over $125 million in private and commercial upland development, as well as infrastructure such as roads and utilities. Physical loss of land is prevented and incidental recreation is generated by increased recreational usage of the project beach. Average annual benefits are as follows:

Annual Benefits	Amount
Storm Damage Reduction	$ 2,166,100
Prevention of Land Loss	108,600
Recreation	228,800
Total	$ 2,503,500

FISCAL YEAR 1996: The requested amount will be applied as follows:

Beach Renourishment (Venice)	$4,184,000
Planning, Engineering, and Design	174,000
Supervision and Administration	42,000
Total	$4,400,000

NON-FEDERAL COST: In accordance with the cost sharing and financing concepts reflected in the Water Resources Development Act of 1986, the non-Federal sponsor must comply with the requirements listed below.

Requirements of Local Cooperation	Payments During Construction and Reimbursement	Annual Operation, Maintenance, Repair, Rehabilitation, and Replacement Costs
Provide lands, easements, and rights-of-way	$ 24,000	
Pay 27.45 percent of all costs associated with the nourishment of the project and 24.01 percent of renourishment costs	26,276,000	
Total Non-Federal Costs	$26,300,000	$ 0

STATUS OF LOCAL COOPERATION: The local sponsor for the Venice segment is the City of Venice in cooperation/agreement with the county. A Local Cooperation Agreement reflecting cost sharing concepts of the Water Resources Development Act of 1986 was executed in December 1993.

COMPARISON OF FEDERAL COST ESTIMATES: The current Federal (Corps) cost estimate of $55,200,000 is an increase of $9,770,000 over the latest estimate ($45,430,000) presented to Congress (FY 1992). Changes include the following:

Item	Amount
Price Escalation on Construction Features	$2,667,200
Schedule Changes	$7,102,800
Total	$9,770,000

STATUS OF ENVIRONMENTAL IMPACT STATEMENT: The final Environmental Impact Statement was filed with the Environmental Protection Agency with a Section 404(b)(1) Evaluation on 9 April 1985.

OTHER INFORMATION: Funds to initiate preconstruction planning were appropriated in Fiscal Year 1988. Funds to initiate construction were appropriated in Fiscal Year 1990.

APPROPRIATION TITLE: Construction, General - Beach Erosion Control

PROJECT: Fort Fisher and Vicinity, North Carolina (Continuing)

LOCATION: The project is located in New Hanover County, approximately 20 miles south of Wilmington, North Carolina, on the Peninsula which separates the lower Cape Fear River from the Atlantic Ocean.

DESCRIPTION: The authorized project consists of the construction of a rubble mound revetment, 3,040 feet in length with a maximum crest elevation of 15 feet above mean sea level. In addition, the project includes the construction of a walking path, overlooks, and steps for beach access at both ends of the revetment to provide for public safety. All work is programmed.

AUTHORIZATION: Section 201 of the River and Harbor and Flood Control Act of 1965.

REMAINING BENEFIT - REMAINING COST RATIO: 4.5 to 1 at 8 1/4 percent.

TOTAL BENEFIT - COST RATIO: 3.9 to 1 at 8 1/4 percent.

BASIS OF BENEFIT - COST RATIO: Benefits are from the Phase II General Design Memorandum Supplement dated March 1993 at January 1993 price levels.

SUMMARIZED FINANCIAL DATA			ACCUM. PCT. OF EST. FED. COST	STATUS (1 Jan 1995)	PERCENT COMPLETE	PHYSICAL COMPLETION SCHEDULE
Estimated Federal Cost		$4,170,000		Entire Project	14	Aug 1996
Estimated Non-Federal Cost		4,170,000				
Cash Contributions	$4,170,000					
Other Costs	0					
Total Estimated Project Cost		$8,340,000				

SUMMARIZED FINANCIAL DATA (Continued)

		ACCUM. PCT. OF EST. FED. COST
Allocations to 30 September 1994	$ 1,176,000	
Conference Allowance for FY 1995	900,000	
Allocation for FY 1995	900,000	
Allocations through FY 1995	2,076,000	50
Allocation Requested for FY 1996	2,094,000	100
Programmed Balance to Complete After FY 1996	0	
Unprogrammed Balance to Complete After FY 1996	0	

PHYSICAL DATA

Stone Revetment

Length: 3040 LF
Crest Elevations:
  North Tieback Section 13 Ft msl
  Main Oceanfront Section 13 to 15 Ft msl
  South Tieback Section 10 Ft msl

Crest Width: 16.5 ft
Walkway: 2770 LF
Stairway: 2, timber
Overlooks: 2

JUSTIFICATION: The project will provide improvements for hurricane protection, beach erosion control, and recreation to the Fort Fisher Historic Site, a Confederate built fort which played a significant role in the Civil War. The property has been designated by Congress as a National Historic Landmark, and by the Department of Interior as a priority battlefield under the American Battlefield Protection Program. Storm damage erosion of the shoreline fronting the historic site has been progressing at a rate of approximately 14.5 feet per year since 1931 and is the highest retrogradation of the ocean shoreline documented for the North Carolina coast. A large portion of the site has been lost to erosion. If erosion is allowed to continue at its present rate, the remaining important features of this historic landmark in the form of earthen-mound fortifications would be destroyed, and an area rich in historical heritage of the American people would be lost. The site is the States most heavily visited historic site with over 200,000 visitors annually. The project would also provide shoreline protection to U.S. Highway 421, which runs through the site, and an increased area for recreation. Average annual benefits are as follows:

Annual Benefits	Amount
Hurricane and Storm Damage Reduction	$2,777,000
Highway Protection	136,000
Total	$2,913,000

FISCAL YEAR 1996: The requested amount will be applied as follows:

Complete Revetment Construction	$1,613,000
Planning, Engineering and Design	262,000
Construction Management	219,000
Total	$2,094,000

NON-FEDERAL COSTS: In accordance with the cost sharing and financing concepts reflected in the Water Resources Development Act of 1986, the non-Federal sponsor must comply with the requirements listed below:

Requirements of Local Cooperation	Payments During Construction and Reimbursements	Annual Operation, Maintenance, Repair, Rehabilitation and Replacement Costs
Pay one-half of the separable cost allocated to recreation (partially offset by a credit for land, easement, rights of way and relocations) and bear all costs of operation, maintenance and replacement of recreation facilities.	$4,170,000	$99,000
Total Non-Federal Costs	$4,170,000	$99,000

The non-Federal sponsor has also agreed to make all required payments concurrently with project construction.

STATUS OF LOCAL COOPERATION: The State of North Carolina, through the Department of Cultural Resources, is the project sponsor. The State appropriated $250,000 for the project in Fiscal Year 1992. By letter dated October 5, 1992, the Department of Cultural Resources restated the State's commitment to support the project and to provide the terms of local cooperation. In a letter dated October 8, 1992, to the Assistant Secretary of the Army for Civil Works, the Secretary of the N.C. Department of Cultural Resources stated that the project and its funding are the departments number one priority. The Governor's budget for FY 94-95 includes $4,170,000 for this project. The project continues to receive strong support from the local citizens group, "The Committee to Save Fort Fisher." The Project Cooperation Agreement is scheduled to be executed in February 1995.

COMPARISON OF FEDERAL COST ESTIMATES: The current Federal (Corps of Engineers) cost estimate of $4,170,000 is a decrease of $680,000 from the latest estimate ($4,850,000) presented to Congress (FY 1994). This change includes the following items:

Item	Amount
Price Escalation on Construction Features	-$ 221,000
Design Changes	- 449,000
Post Contract Award and Other Estimating Adjustments	- 10,000
Total	-$ 680,000

STATUS OF ENVIRONMENTAL IMPACT STATEMENT: The final EIS was filed with the CEQ in July 1976. A Supplemental Information Report (SIR) was filed with EPA in October 1982. An Environmental Assessment was prepared and circulated for review in June 1994. A Finding of No Significant Impact was signed in September 1994.

OTHER INFORMATION: Funds to initiate preconstruction engineering and design were appropriated in Fiscal Year 1992. Funds to initiate construction were appropriated in Fiscal Year 1995. The North Carolina Division of Coastal Management granted a permit for the construction of the revetment on 13 August 1993.

APPROPRIATION TITLE: Construction, General - Beach Erosion Control

PROJECT: Myrtle Beach, South Carolina (Continuing)

LOCATION: Myrtle Beach is located along the northern coast of South Carolina. The area is commonly referred to as the Grand Strand. The Grand Strand extends from Little River Inlet at the North Carolina border, in a southerly direction, to Murrells Inlet, South Carolina for a total distance of approximately 37 miles. This project includes the developed area along the coast of Horry County, SC, and a portion of the coastal area of Georgetown County, SC. Major municipalities in the project area include the cities of Myrtle Beach and North Myrtle Beach, Garden City, and the Town of Surfside Beach.

DESCRIPTION: The plan of improvement would place about 5.1 million cubic yards of sand over a total project reach of 25.4 miles of beach encompassing three separable reaches. This material will come from offshore borrow sites. Periodic nourishment will be required once every 8 to 10 years throughout the project. All work is programmed.

AUTHORIZATION: Water Resources Development Act of 1990.

REMAINING BENEFIT - REMAINING COST RATIO: 3.9 to 1 at 8 percent.

TOTAL BENEFIT - COST RATIO: 3.9 to 1 at 8 percent.

BASIS OF BENEFIT - COST RATIO: Benefits are from the General Design Memorandum dated March 1993 at 1992 price levels.

SUMMARIZED FINANCIAL DATA				STATUS: (1 Jan 1995)	PERCENT COMPLETE	PHYSICAL COMPLETION SCHEDULE
Estimated Federal Cost			160,551,000			
Initial Construction		40,125,000		Initial Construction	4	May 1997
Periodic Nourishment		120,426,000		Future Nourishment	0	Being determined
Estimated Non-Federal Cost			86,450,000	Entire Project	1	Being determined
Initial Construction		21,606,000				
Cash Contribution	20,901,000					
Other Costs	705,000					

SUMMARIZED FINANCIAL DATA (Continued):

Periodic Nourishment		64,844,000	
Cash Contribution	64,844,000		
Other Costs	0		
Total Estimated Project Cost			247,001,000
Initial Construction		61,731,000	
Periodic Nourishment		185,270,000	

		ACCUM. PCT. OF EST. FED COST
Allocations to 30 September 1994	2,666,000	
Conference Allowance for FY 1995	3,000,000	
Allocation for FY 1995	2,525,000 1/	
Allocations through FY 1995	5,191,000	3
Allocation Requested for FY 1996	17,000,000	9
Programmed Balance to Complete After FY 1996	138,360,000	
Unprogrammed Balance to Complete After FY 1996	0	

1/ Reflects $475,000 reduction for savings and slippage, and $2,100,000 in programmed carryover into FY 96.

PHYSICAL DATA

	Berm Elevation	Berm Width	Length
Reach 1 (North Myrtle Beach)	10 feet	20 feet	8.6 miles
Reach 2 (Myrtle Beach)	9 feet	15 feet	9.0 miles
Reach 3 (Garden City/Surfside)	7 feet	10 feet	7.7 miles

Initial Beach Fill - 5,135,000 cubic yards
Periodic Nourishment - 6,150,000 cubic yards

JUSTIFICATION: The project area has experienced severe beach erosion and heavy property damage as a result of storm surges from hurricanes and northeasters in recent years. The Myrtle Beach area currently experiences shoreline erosion at a rate of approximately 1 foot per year. The project is located in a major tourist area and is a vital economic resource for the State. This area accounts for approximately 38 percent of South Carolina's total revenue from travel and tourism. The value of front row coastal development for the 37 mile area is estimated to be in excess of $1.4 billion. Based on conditions without the proposed project and historical erosion rates, the average annual equivalent damages to 1,400 structures is estimated to be $21,070,000. Average annual benefits are as follows:

Annual Benefits	Amount
Hurricane & Storm Damage Reduction	16,704,000
Recreation	4,366,000
Total	21,070,000

FISCAL YEAR 1996: The total program amount, including the requested and programmed carryover amounts of $17,000,000 and $2,100,000, respectively, will be applied as follows:

Construction	$18,390,000
Engineering and Design	310,000
Construction Management	400,000
Total	$19,100,000

NON-FEDERAL COST: In accordance with the cost sharing and financing concepts reflected in the Water Resources Development Act of 1986, the non-Federal sponsor must comply with the requirements listed below:

Requirements of Local Cooperation	Payments During Construction and Reimbursements	Annual Operation, Maintenance, Repair Rehabilitation and Replacement Costs
Provide lands, easements, rights of way, and borrow and excavated or dredged material disposal areas, after reductions for such credit have been made in the required cash payments.	705,000	

NON-FEDERAL COSTS (Continued):

Modify or relocate utilities, roads, bridges (except railroad bridges), and other facilities, where necessary for the construction of the project.	700,000	
Pay 35 percent of the costs allocated to hurricane and storm damage reduction, and bear all costs of operation, maintenance, repair, rehabilitation, and replacement of hurricane and storm damage reduction facilities.	85,045,500	7,000 per reach
Total Non-Federal Costs	$ 86,450,500	$ 21,000

The non-Federal sponsor has also agreed to make all required payments concurrently with project construction.

STATUS OF LOCAL COOPERATION: This project has three non-Federal sponsors, one for each reach. The non-Federal sponsor for Reach 1 is the City of North Myrtle Beach. The non-Federal sponsor for Reach 2 is the City of Myrtle Beach. Reach 3 lies within the jurisdictional boundaries of Georgetown County, Horry County, and the Town of Surfside Beach. Horry County has agreed to be the non-Federal sponsor for Reach 3; they plan to enter into a separate agreement with Georgetown County and the Town of Surfside Beach for the cost sharing of their respective portions. As of this date, all three sponsors have been setting aside funds provided from the state accommodations tax revenues. The state receives 2 percent of every $1.00 charged for motel accommodations. These funds will cover 50 percent of the non-Federal funds for this project. The remaining 50 percent of the non-Federal funds will be provided by the State of South Carolina through appropriated funds. A joint meeting held in Columbia, South Carolina on February 18, 1993, confirmed the commitment by the non-Federal sponsors and the State legislative delegation from Horry and Georgetown County to meet their financial obligations and expenditures to comply with the project schedule. Our analysis of the non-Federal sponsors' financial capability to participate in the project affirms that the sponsor has a reasonable and implementable plan for meeting its financial commitment. The three Project Cooperation Agreements are scheduled to be executed in February 1995.

COMPARISON OF FEDERAL COST ESTIMATES: The current Federal cost estimate is $160,550,500.

STATUS OF ENVIRONMENTAL IMPACT STATEMENT: The final EIS was filed with EPA in July 1993.

OTHER INFORMATION: Funds to initiate preconstruction engineering and design were appropriated in Fiscal Year 1990. Funds to initiate construction were appropriated in Fiscal Year 1995.

APPROPRIATION TITLE: Construction, General - Local Protection (Flood Control)

PROJECT: Central and Southern Florida, Florida (Continuing)

LOCATION: The project is located in the southeasterly 18 counties of the State of Florida. Principle areas are the Upper St. Johns River Basin, Kissimmee River Basin, Lake Okeechobee-Everglades Area, and East Coast-Everglades Area.

DESCRIPTION: The Central and Southern Florida Project involves an area of about 16,000 square miles, which includes all or part of 18 counties in central and southern Florida. It embraces Lake Okeechobee, its regulatory outlets, the Florida Everglades, the Upper St. Johns and Kissimmee River Basins, and the lower east coast of Florida. Project purposes are flood control; municipal, industrial, and agricultural water supply; prevention of salt water intrusion, water supply for Everglades National Park; fish and wildlife preservation; navigation; and recreation. In addition to completed work, portions of the Upper St. Johns River, South Dade County, Port Mayaca Recreation, Kissimmee Basin, Herbert Hoover Dike, West Palm Beach Canal, St Lucie Canal Bank, Agricultural Area, Lake Okeechobee, East Cape and Homestead Canals, Manatee Pass-Through Gates, HTW Cleanup of C-103S, North Dade County, and the Central & Southern Florida Project Review separable elements are currently programmed; all remaining separable elements are unprogrammed. Modified Water Deliveries to Everglades National Park will be accomplished with funds transferred to the Corps of Engineers by the National Park Service. The restoration of the Kissimmee River Project is being accomplished with a separate appropriation.

AUTHORIZATION: Flood Control Acts of 1948, 1954, 1960, 1962, 1965, and 1968; Authorization in 1970 under Section 201 of the Flood Control Act of 1965, and the Water Resources Development Acts of 1986, 1988, 1990, and 1992.

REMAINING BENEFIT - REMAINING COST RATIO: 4.0 to 1 at 2 1/2 percent.

TOTAL BENEFIT - COST RATIO: 4.8 to 1 at 2 1/2 percent.

INITIAL BENEFIT - COST RATIO: 2.1 to 1 at 2 1/2 percent (FY 1950).

BASIS OF BENEFIT - COST RATIO: Benefits are a composite of the latest benefits available from the individual reports of the separable elements of the total project.

SUMMARIZED FINANCIAL DATA					ACCUM. PCT. OF EST. FED COST	STATUS (1 Jan 1995)	PERCENT COMPLETE	PHYSICAL COMPLETION SCHEDULE
Estimated Federal Cost			1,358,000,000			Misc Completed Works	100	Oct 1992
Programmed Construction		503,487,000				Upper St. Johns River	62	Being determined
Unprogrammed Construction		854,513,000				South Dade County	24	Being determined
Estimated Non-Federal Cost			702,000,000	1/		Entire Project	77	Being determined
Programmed Construction		267,787,000						
Cash Contributions	80,894,000							
Other Costs	186,893,000							
Estimated Non-Federal Cost								
Unprogrammed Construction		434,213,000						
Cash Contributions	230,624,000							
Other Costs	203,589,000							
Total Estimated Programmed Construction Cost			771,274,000					
Total Estimated Unprogrammed Construction Cost			1,288,726,000					
Total Estimated Project Cost			2,060,000,000					
Allocations to 30 September 1994			404,256,000					
Conference Allowance for FY 1995			8,624,000					
Allocation for FY 1995			8,624,000	2/				
Allocations through FY 1995			412,880,000		30			
Allocation Requested for FY 1996			3,726,000		31			
Programmed Balance to Complete after FY 1996			86,881,000					
Unprogrammed Balance to Complete after FY 1996			854,513,000					

1/ Local interests have also expended over $1,000,000 on emergency construction and are progressively providing necessary secondary work.
2/ Reflects $6,255,000 in programmed carryover into FY 96.

Division: South Atlantic District: Jacksonville Central and Southern Florida, FL

6 February 1995

PHYSICAL DATA

Lands and Damages The 1968 authorization included lands for recreational areas.		Relocations-Railroads (Bridges)	56
		Locks (Number)	25
		Length (Feet)	60 to 400
Pumping Plants (Number)	30	Width (Feet)	20 to 56
Capacity (Gallons per Minute)	20,623,000	Canals (Miles)	978
Floodway Control & Diversion Structures (Number)	212	Levees (Miles)	990
Relocations-Highways (Bridges)	2	Minimum to Maximum Height (Feet)	2 to 30

JUSTIFICATION: The Central and Southern Florida project is primarily a flood control project in response to the maximum flood of record in 1947. Existing damages, without the project, were $59,693,000 ($366,903,000 at 1 October 1989 price levels). The 1947 flood frequency averages 1 in 25 years over the project area, with an average duration of 70 days. Minor floods occur almost yearly in the project area and major floods occur frequently. This situation is aggravated by wet antecedent conditions followed by heavy seasonal rainfall. The average degree of protection provided by the completed project will be a 10 year flood frequency protection. Upon completion, 2,853,700 acres will be protected. This encompasses 2,765,100 agricultural acres and 88,600 urban acres. The present value of property subject to flood damages is about $12.3 billion. Property types include residential, commercial, industrial, public, and agricultural.

Average annual damages without the project would be $110,580,000 and $22,536,000 with the project. Damages attributable to urban property are 16.7 percent and 83.3 percent are attributable to rural property. The proportion of average annual damages prevented are 36.8 percent to existing development and 63.2 percent to future development. Flood damages incurred since project authorization through March, 1987 total $306,370,000; damages prevented by project works in place at times of flood total $474,793,000 and damages with no project works would have totaled $781,163,000.

Under Public Law 90-483 (River and Harbor Act of 1968), an additional purpose, water supply, was added to the Central and Southern Florida project. The storage capacity of the entire project is 2,953,000 average annual acre-feet divided into approximately 1,600,000 acre-feet for urban use by 2020 and 740,000 acre-feet for agricultural use by 2020. The Everglades National Park is assured of 315,000 acre-feet per year and an additional 298,000 acre-feet in dry years. The pumping rate for irrigation of 590 square miles would yield approximately 917,850 acre-feet per year for agricultural use. Recurrent drought conditions with resultant low flows require supplemental irrigation to ensure adequate crop yields.

JUSTIFICATION (Continued): Average annual benefits are as follows:

Annual Benefits	Amount
Flood Control	235,213,000
Municipal and Industrial Water Supply	25,664,000
Agricultural Water Supply	27,614,000
Recreation	11,109,000
Fish and Wildlife	238,000
Area Redevelopment	3,012,000
Total	302,850,000

FISCAL YEAR 1996: The total program amount, including the requested and programmed carryover amounts of $3,726,000 and $6,255,000, respectively, will be applied as follows:

Initiate construction of channels and canals for South Dade County	197,000
Continue construction of channels, canals, levees, and floodwalls for Upper St. Johns River Basin	2,857,000
Continue construction of recreational facilities for Upper St. Johns River Basin	1,622,000
Continue the feasibility phase of the Central and Southern Florida Project Review study	1,000,000
Planning, Engineering and Design for South Dade County	1,441,000
Planning, Engineering and Design for Upper St. Johns River Basin	752,000
Planning, Engineering and Design for West Palm Beach Canal	227,000
Planning, Engineering and Design for Kissimmee Basin	100,000
Planning, Engineering and Design for Port Mayaca Recreation	47,000
Planning, Engineering and Design for Manatee Pass-Through Gates	1,442,000
Construction Management	296,000
Total	$9,981,000

NON-FEDERAL COST: In accordance with the cost sharing and financing concepts reflected in the authorizing legislation and the Water Resources Development Act of 1986, as applicable, the non-Federal sponsor must comply with the requirements listed below:

Requirements of Local Cooperation	Payments During Construction and Reimbursements	Annual Operation, Maintenance, Repair, Rehabilitation, and Replacement Costs
Upper St. Johns River Basin		
Provide lands, easements, rights of way, and dredged material disposal areas.	86,232,000	
Modify or relocate buildings, utilities, roads, bridges (except railroad bridges), and other facilities, where necessary for the construction of the project.	11,060,000	
Pay one-half of the separable costs allocated to recreation (except recreational navigation) and bear all costs of operation, maintenance, repair and replacement of recreation facilities.	3,471,000	82,000
Total	100,763,000	82,000
South Dade County		
Provide lands, easements, rights of way, and dredged material disposal areas.	56,993,000	
Modify or relocate buildings, utilities, roads, bridges (except railroad bridges), and other facilities, where necessary for the construction of the project.	419,000	

NON-FEDERAL COST (Continued):

Pay 20 percent of the cost of the project assigned to flood control and bear all costs of operation, maintenance, and replacement of flood control facilities.	15,581,000	845,000
Total	72,993,000	845,000
Completed Works		
Provide lands, easements, rights of way, and modify or relocate buildings, utilities, roads, bridges and other facilities.	32,189,000	
Cash Contribution	61,842,000	
Total	94,031,000	
Total Non-Federal First Cost	267,787,000	927,000

The non-Federal sponsor has also agreed to make all required payments concurrently with project construction.

STATUS OF LOCAL COOPERATION: Assurances of local cooperation have been accepted from the local sponsor, the South Florida Water Management District, for all works authorized under the Central and Southern Florida Flood Control project except for Small Boat Navigation features added in 1970 under Section 201 of the 1965 Flood Control Act and the Upper St. Johns River portion of the project. Local interests voluntarily executed a supplemental assurances contract which was approved by the District Engineer on 1 July 1972 for all modifications to the project except the features added in 1970. There is limited local interest in the Small Boat Navigation feature at this time. Assurances of local cooperation have been accepted from the St. Johns River Water Management District for the Upper St. Johns River portion, and was executed on 30 December 1987.

COMPARISON OF FEDERAL COST ESTIMATES: The current Federal (Corps) cost estimate of $1,358,000,000 is an increase of $319,000,000 over the latest estimate ($1,039,000,000) submitted to Congress (FY 1995). This change includes the following items:

Item	Amount
Price Escalation on Construction Features	16,436,000
Design Changes	300,545,000
Post Contract Award and Other Estimating Adjustments	2,019,000
Total	$319,000,000

STATUS OF ENVIRONMENTAL IMPACT STATEMENT: The latest Environmental Impact Statement for the project was for the Upper St. Johns River separable element and was filed with the Environmental Protection Agency on 29 November 1985. The final Environmental Impact Statement for South Dade County (C-111) was filed with the Environmental Protection Agency in June 1994.

OTHER INFORMATION: Funds to initiate preconstruction planning and construction were appropriated in FY 1950. The Everglades National Park Protection and Expansion Act, signed 13 December 1989, authorizes construction of structural works required for improved water deliveries to the Everglades National Park, construction of flood protection works for the residential area in the East Everglades, and acquisition of 107,600 acres of privately owned wetlands in the East Everglades. The Department of the Interior and the State of Florida would acquire the land and the Secretary of the Army would construct all project modifications with funds transferred to the Corps of Engineers by the National Park Service for this purpose. The Kissimmee Restoration Project was authorized by the Water Resources Development Act of 1992. It is being funded by a separate appropriation. The project cooperation agreement was executed in March 1994. Preconstruction, engineering, and design is underway, and construction will be initiated in Fiscal Year 1997.

The Water Resources Development Act of 1992 authorizes the Chief of Engineers to review the Central and Southern Florida (C&SF) Project to determine whether modifications to the existing project are advisable at the present time due to significantly changed physical, biological, demographic, or economic conditions, with particular reference to modifying the project or its operation for improving the quality of the environment, improving protection of the aquifer, and improving the integrity, capability, and conservation of urban water supplies affected by the project or its operation. The central organizing theme of the study is restoration of the Everglades ecosystem while accommodating other demands for water and related land resources in south Florida. Recognizing the complexity of ecological restoration and the

OTHER INFORMATION (Continued):

extensive interaction between the ecosystem and other uses of water and related land resources, oversight of the reconnaissance study is provided by a Washington level committee, which provides policy guidance, study coordination, and appropriate agency participation. The committee is composed of representatives from DOI, EPA, NBS, DOD, and NOAA. The Reconnaissance Report was submitted on 30 November 1994. The plan of study for the feasibility phase is being coordinated with the South Florida Water Management District. Present plans call for initiating three Feasibility Reports: Ecosystem Restoration, Water Preserves, and Florida Bay Circulation Model Studies.

In Fiscal Year 1994, preconstruction, engineering, and design work was initiated on three congressional adds: East Cape and Homestead Canals, Manatee Pass-Through Gates, and HTW Cleanup of C-103S. The Manatee Pass-Through Gates Study is evaluating potential methods for preventing Manatee deaths associated with operation of existing structures and locks. The East Cape and Homestead Canals project will prevent salt water intrusion into fresh water bays in Everglades National Park by repairing the plugs in the two canals. A memorandum of understanding for this work is being coordinated with the Everglades National Park Service. The HTW Cleanup of C-103S is evaluating the extent of the soil contamination at the Homestead power plant and evaluating Corps authority for cleanup.

SUMMARIZED FINANCIAL DATA:

Upper St. Johns River Basin

Estimated Federal Cost			81,968,000
Programmed Construction		77,610,000	
Unprogrammed Construction		4,358,000	
Estimated Non-Federal Cost			100,763,000
Programmed Construction		100,763,000	
Cash Contributions	3,471,000		
Other Costs	97,292,000		
Estimated Non-Federal Cost			
Unprogrammed Construction		0	
Cash Contributions	0		
Other Costs	0		

SUMMARIZED FINANCIAL DATA (Continued):

Total Estimated Programmed Construction Cost	178,373,000
Total Estimated Unprogrammed Construction Cost	4,358,000
Total Estimated Project Cost	182,731,000

REMAINING BENEFIT-REMAINING COST RATIO: 2.7 to 1 at 8 5/8 percent.

TOTAL BENEFIT-COST RATIO: 3.0 to 1 at 8 5/8 percent.

South Dade County

Estimated Federal Cost			83,495,000
Programmed Construction		83,241,000	
Unprogrammed Construction		254,000	
Estimated Non-Federal Cost			72,993,000
Programmed Construction		72,765,000	
Cash Contributions	15,442,000		
Other Costs	57,323,000		
Estimated Non-Federal Cost			
Unprogrammed Construction		228,000	
Cash Contributions	228,000		
Other Costs	0		
Total Estimated Programmed Construction Cost			156,006,000
Total Estimated Unprogrammed Construction Cost			482,000
Total Estimated Project Cost			156,488,000

REMAINING BENEFIT-REMAINING COST RATIO: 3.8 to 1 at 8 1/2 percent.

TOTAL BENEFIT-COST RATIO: 3.8 to 1 at 8 1/2 percent.

APPROPRIATION TITLE: Construction, General - Local Protection (Flood Control)

PROJECT: Dade County, Florida (Continuing)

LOCATION: Dade County is on the southeast coast of Florida. The project area consists of that part of the Atlantic shoreline of the county from Government Cut north to Bakers Haulover Inlet, Haulover Beach Park, and the section of beach (Sunny Isles) extending 2.5 miles north of Haulover Beach Park.

DESCRIPTION: The project provides for a protective and recreational beach with a dune for beach erosion control and hurricane protection along 9.3 miles and a protective and recreational beach along 3.7 miles. The berm width is 50 feet at elevation +9.0 feet MLW for 10.5 miles and 20 feet wide at +9.0 feet MLW for 2.5 miles. All work is programmed.

AUTHORIZATION: Flood Control Act of 1968, Water Resources Development Act of 1974, Supplemental Appropriations Act of 1985, and Water Resources Development Act of 1986.

REMAINING BENEFIT-REMAINING COST RATIO: Not applicable because initial construction has been completed.

TOTAL BENEFIT-COST RATIO: 2.6 to 1 at 8-3/8 percent.

INITIAL BENEFIT-COST RATIO: 5.1 to 1 at 3-1/4 percent (FY 1965).

BASIS OF BENEFIT-COST RATIO: Initial benefits are from the June 1965 Dade County Report at October 1964 price levels. Total benefits are from the April 1985 Dade County, North of Haulover Beach Park, Design Memorandum at October 1984 price levels.

SUMMARIZED FINANCIAL DATA			ACCUM. PCT. OF EST. FED COST	STATUS (1 Jan 1995)	PERCENT COMPLETE	PHYSICAL COMPLETION SCHEDULE
Estimated Federal Cost		170,400,000		Breakwaters and Seawalls		
Initial Construction	39,177,000			Jetty Extension	100	Aug 1976
Periodic Nourishment	131,223,000			Upgrading N. Jetty at Government Cut	100	Nov 1983

Division: South Atlantic District: Jacksonville Dade County, FL

6 February 1995

SUMMARIZED FINANCIAL DATA (Continued):

					ACCUM. PCT. OF EST. FED COST
Estimated Non-Federal Cost			154,600,000		
Initial Construction		33,041,000			
Cash Contributions	31,202,000				
Other Costs	1,839,000				
Periodic Nourishment		121,559,000			
Cash Contributions	121,559,000				
Other Costs	0				
Total Estimated Project Cost			325,000,000		
Initial Construction		72,218,000			
Periodic Nourishment		252,782,000			
Allocations to 30 September 1994				48,698,000	
Conference Allowance for FY 1995				3,600,000	
Allocation for FY 1995				3,030,000 1/	
Allocations through FY 1995				51,728,000	30
Allocation Requested for FY 1996				1,300,000	31
Programmed Balance to Complete after FY 1996				117,982,000	
Unprogrammed Balance to Complete after FY 1996				0	

STATUS (1 Jan 1995)	PERCENT COMPLETE	PHYSICAL COMPLETION SCHEDULE
Jetty Rehabilitation at Haulover Inlet	100	Nov 1986
Beach Replenishment		
Initial Fill	100	Aug 1989
Periodic Nourishment		
Sunny Isles	0	Being determined
Dade County	10	Being determined
Entire Project	25	Being determined

1/ Reflects $570,000 assigned as savings and slippage.

PHYSICAL DATA

Jetty Extension	1
Initial Beach Fill	15,597,000 cy
Advance Nourishment	450,000 cy
Periodic Nourishment	3,540,000 cy/10 years

JUSTIFICATION: The Dade County shore, occupied by Miami Beach and a number of smaller communities, is highly developed and probably represents the most densely concentrated resort area in the world. The area is heavily visited by tourists throughout the year. The estimated current attendance for the project shore exceeds 15 million annually. Prior to the initial beach fill, recession of the shore caused loss of valuable beaches and property and placed seawalls and other structures under direct wave attack. At a number of locations, erosion undermined or threatened to undermine shorefront structures. Dade County lies in a zone of relatively high hurricane frequency, and many of the most intense hurricanes of record have passed over or near the area. Storm surge and waves generated in the ocean and in Biscayne Bay by past hurricanes have caused major tidal flooding in the project area. A severe hurricane crossing the area on a critical path could cause a major flood disaster. The September 1926 hurricane devastated Miami and took 100 lives. Hurricane Andrew impacted the shorefront in Dade County in August 1992. The project prevented an estimated $20 million in damages to shorefront development, with a loss of only 2 percent of the beach fill. The beach fill loss due to Hurricane Andrew is being restored under the authority of PL 84-99 during the overall renourishment of the project during FY 94 and FY 95. The beaches of Dade County are of prime importance as tourist attractions. It is essential to the economy of the area that the beaches be maintained and preserved. Average annual benefits are as follows:

Annual Benefits	Amount
Beach Erosion Control	$ 3,795,000
Recreation	22,181,000
Storm Damage Prevention	1,879,000
Land Enhancement	125,000
Total	$ 27,980,000

FISCAL YEAR 1996: The requested amount will be applied as follows:

Complete renourishment (96th-80th Streets and Lincoln Road-Government Cut)	$1,025,000
Complete Planning, Engineering and Design for Project Modifications at Sunny Isles and for the North Jetty at Government Cut	250,000
Construction Management	25,000
Total	$ 1,300,000

NON-FEDERAL COST: In accordance with the cost-sharing concepts reflected in the authorizing legislation, the non-Federal sponsor must comply with the requirements listed below.

Requirements of Local Cooperation	Payments During Construction and Reimbursements	Annual Operation, Maintenance, Repair, Rehabilitation, and Replacement Costs
Provide lands, easements, and rights-of-way.	$ 1,839,000	
Pay 41.3 percent of the costs allocated to initial nourish the reach south of Bakers Haulover Inlet; 50.2 percent of the costs to renourish the reach south of Bakers Haulover Inlet; 47.5 percent of the costs to renourish Sunny Isles; and 30 percent to nourish and renourish the reach at Haulover Beach Park.	152,761,000	
Total	$154,600,000	$ 0

STATUS OF LOCAL COOPERATION: The Dade County Board of County Commissioners, Miami, Florida, is the local sponsor. A Local Cooperation Agreement pursuant to Section 221 of the River and Harbor and Flood Control Act of 1970 (PL 91-611) was accepted by the Secretary of the Army on 16 January 1973. A supplemental agreement for reimbursement to the local sponsor for the Bal Harbour portion was approved on 30 June 1976. An agreement for the section north of Haulover Beach Park was signed on 20 June 1986. When the period covered by the existing local cooperation agreement expires, a supplemental agreement will be negotiated with the non-Federal sponsor.

COMPARISON OF FEDERAL COST ESTIMATES: The current Federal (Corps) cost estimate of $170,400,000 reflects no change from the latest estimate ($170,400,000) presented to Congress (FY 1995).

STATUS OF ENVIRONMENTAL IMPACT STATEMENT AND COMPLIANCE WITH CLEAN WATER ACT: The final EIS was filed with CEQ on 27 August 1976. The provisions of Section 404 of the Clean Water Act were met by a Section 404(b)(1) Evaluation in June 1984. A supplement to the EIS was filed with EPA on 18 March 1983.

OTHER INFORMATION: Funds to initiate preconstruction planning were appropriated in FY 1973 and initial construction funds were appropriated in FY 1977. Funds to initiate construction of the Sunny Isles (North of Haulover Beach Park) segment were appropriated in FY 1985. Section 69 of the Water Resources Development Act of 1974 authorized initial construction by non-Federal interests of the 0.85-mile segment immediately south of Bakers Haulover Inlet (Bal Harbour). Local interests have accomplished the work and reimbursement was provided by funds included in the 1976 Appropriations Act. Section 501(a) of the Water Resources Development Act of 1986 authorized the extension of Federal participation in beach nourishment from 10 years to the life of the project; however, a period of 50 years was used for economic analysis of the project.

APPROPRIATION TITLE: Construction, General - Local Protection (Flood Control)

PROJECT: Tombigbee River and Tributaries, Mississippi and Alabama (Channel Improvement) (Continuing)

LOCATION: The project is located on the tributaries of the Tombigbee River in northwest Alabama and northeast Mississippi.

DESCRIPTION: The plan of improvement is to improve 77.4 miles along 7 tributary streams of the Tombigbee River by means of erosion protection, clearing and snagging, channel enlargement, new channels, and cutoffs. All work is programmed except construction of the flood warning system.

AUTHORIZATION: Flood Control Act of 1958 and Supplemental Appropriations and Recision Act of 1980.

REMAINING BENEFIT - REMAINING COST RATIO: 4.9 to 1 at 3 percent.

TOTAL BENEFIT-COST RATIO: 2.7 to 1 at 3 percent.

INITIAL BENEFIT-COST RATIO: 1.7 to 1 at 3 percent (FY 1965).

BASIS OF BENEFIT-COST RATIO: Benefits are from the latest available evaluation approved in October 1986 at October 1985 price levels for Luxapalila Creek. Benefits for the remainder of the project were approved in October 1955.

SUMMARIZED FINANCIAL DATA

Estimated Federal Cost			$35,745,000
Programmed Construction		$35,610,000	
Unprogrammed Construction		135,000	
Estimated Non-Federal Cost			2,863,000
Programmed Construction		2,818,000	
Cash Contributions	$ 844,000		
Other Costs	1,974,000		

Estimated Non-Federal Cost		
Unprogrammed Construction		$ 45,000
Cash Contributions	35,000	
Other Costs	10,000	
Total Estimated Programmed Construction Cost		38,428,000
Total Estimated Unprogrammed Construction Cost		180,000
Total Estimated Project Cost		$38,608,000

Division: South Atlantic District: Mobile Tombigbee River and Tributaries, MS & AL

SUMMARIZED FINANCIAL DATA (Continued)

		ACCUM. PCT. OF EST. FED. COST
Allocations to 30 September 1994	29,914,000	
Conference Allowance for FY 1995	1,200,000	
Allocations for FY 1995	1,010,000 1/	
Allocations through FY 1995	30,924,000	87
Allocations Requested for FY 1996	4,686,000	99
Programmed Balance to Complete after FY 1996	0	
Unprogrammed Balance to Complete after FY 1996	135,000	

1/ Reflects $190,000 reduction assigned as savings and slippage.

STATUS: (1 Jan 1995)	PERCENT COMPLETE	COMPLETION SCHEDULE
Big Browns Creek	100	16 Nov 1965
Donivan Creek	100	18 Apr 1966
Twenty Mile Creek		
Mouth to Mi. 11.7	100	1 Aug 1967
Mi. 11.7 - 22.0	100	31 Dec 1989
Mantachie Creek	100	2 Nov 1967
James Creek	100	3 Feb 1969
Stanefer Creek	100	10 Feb 1969

	PERCENT COMPLETE	COMPLETION SCHEDULE
Transition Sections - Donivan & Twenty Mile Creeks	100	27 Mar 1971
Luxapalila Creek	50	Sep 1996
Lower 2.1 Miles	(100)	(Nov 1973)
Remainder	(20)	(Sep 1996)
Entire Project	85	Sep 1996

PHYSICAL DATA

CHANNELS: Improve 77.4 miles along 7 tributary streams of the Tombigbee River by means of erosion protection, clearing and snagging, channel enlargement, new channels, and cut-offs. Work has been completed on 51.1 miles of channel. Remaining work is along Luxapalila Creek (26.3 miles).

PHYSICAL DATA (Continued)

JUSTIFICATION: Luxapalila Creek is located in northeast Mississippi and northwest Alabama. It rises in southern Marion County near Winfield, Alabama and flows in a southwesterly direction for 75 miles through Fayette and Lamar Counties, Alabama, and Lowndes County, Mississippi to join the Tombigbee River through the left bank at river mile 362.35. Floods occur along Luxapalila Creek with fairly frequent regularity. Damages along Luxapalila Creek are from urban flooding in Columbus, Mississippi, and rural flooding of agricultural and forested lands upstream of Columbus. Damages in Columbus are to 2,573 residential structures, heavy industry, and extensive strip type commercial development. Under existing conditions, the 100-year flood will cause $87.3 million in damages at October 1994 prices. The maximum flood of record on Luxapalila Creek occurred in April 1979 and caused about $730,000 in damages at October 1994 prices in the Columbus area.

The average annual benefits are as follows:

Annual Benefits	Amount
Flood Control	$3,025,000
Area Redevelopment	49,000
Fish and Wildlife	116,000
Total	$3,190,000

FISCAL YEAR 1996: The requested amount of $4,686,000 will be applied as follows:

Complete Construction of Luxapalila Creek	$4,163,000
Complete Planning, Engineering and Design for Luxapalila Creek	96,000
Complete Construction Management for Luxapalila Creek	427,000
Total	$ 4,686,000

NON-FEDERAL COST: As set forth in the 1958 Flood Control Act, local interests must comply with the requirements listed below.

	Payments During Construction and Reimbursements	Annual Operation, Maintenance, and Replacement Costs
Completed Streams		
Provide lands, easements and rights-of-way.	$152,000	
Provide cash contribution per 1958 Flood Control Act.	31,000	
Modify or relocate buildings, utilities, roads, highway bridges, and other facilities, where necessary in the construction of the project and bear all costs of operation, maintenance, and replacement of flood control facilities with the exception of Twenty Mile Creek from mile 11.7 to 22.0.	152,000	$84,000
Subtotal	$335,000	$84,000
Luxapalila Creek (Structural portion of project-programmed)		
Provide lands, easements, rights-of-way, and borrow and excavated or dredged material disposal areas.	$ 809,000	
Modify or relocate utilities, roads, bridges, (except railroad bridges), and other facilities, where necessary for the construction of the project.	861,000	
Pay costs allocated to flood control for structural, and mitigation measures, and bear all costs of operation, maintenance, and replacement of flood control facilities.	813,000	$222,000
Sub-Total	$ 2,483,000	$222,000

Requirements of Local Cooperation (Continued)

	Payments During Construction and Reimbursements	Annual Operation, Maintenance, and Replacement Costs
Luxapalila Creek (Non-Structural Portion of Project - unprogrammed)		
Provide lands, easements, rights-or-way and borrow and excavated or dredged material disposal area	$10,000	
Pay costs allocated to flood control for non-structural measures, and bear all costs of operation, maintenance, and replacement of flood control facilities.	35,000	
Sub-Total	45,000	
TOTAL	$ 2,863,000	$306,000

STATUS OF LOCAL COOPERATION: House Bill 179 was enacted into law during the 1962 regular session of the Mississippi Legislature. This law authorized creation of the Tombigbee River Valley Water Management District (TRVWMD) through which all the affected counties in Mississippi may participate in the project as a unit to assume the role of local sponsor.

The TRVWMD has been set up in accordance with provisions of the enabling legislation and has furnished satisfactory resolution covering the portion of the project in Mississippi. By resolution adopted in April 1973, TRVWMD gave assurances of its compliance with requirements of Public Law 91-646 (Uniform Relocations Assistance and Real Property Acquisition Policies Act of 1970). Lands and cash contributions have been furnished as required.

The Alabama Legislature, in its 1967 session, authorized formation of a public corporation to be named Tombigbee Valley Development Authority (TVDA) for the purpose of further development of the Tombigbee River and Tributary streams. The organization has been formed and in a referendum held 5 December 1967, the voters of Alabama authorized a bond issue not to exceed $10,000,000 to finance local interests' participation in this project and the Tennessee-Tombigbee Waterway project. Satisfactory resolution has been furnished. In February 1974, TVDA adopted a resolution pledging its compliance with provisions of Public Law 91-646.

STATUS OF LOCAL COOPERATION (Continued): The TRVWMD and TVDA have furnished lands, completed relocations and provided cash contributions as required for the completed work. The Local Cooperation Agreement which contains the new cost sharing requirements for Luxapalila Creek was signed with TRVWMD and TVDA in September 1992.

COMPARISON OF FEDERAL COST ESTIMATES: The current Federal (Corps) cost estimate of $35,745,000 is a decrease of $1,929,000 from the latest estimate of ($37,674,000) presented to Congress (FY 1994).

Post Contract Award and Other Estimating Adjustments	$-1,929,000
TOTAL	$-1,929,000

STATUS OF ENVIRONMENTAL IMPACT STATEMENT: The Environmental Impact Statement (EIS) for Luxapalila Creek was filed with the Council of Environmental Quality on 21 May 1975. A Final EIS covering the alternative and recommended plan for Luxapalila Creek was filed with the Environmental Protection Agency in May 1991. A draft Environmental Assessment was circulated for minor design changes, and a Finding of No Significant Impact was signed in May 94.

OTHER INFORMATION: Funds to initiate preconstruction planning were appropriated in Fiscal Year 1962 and funds to initiate construction were appropriated in Fiscal Year 1965. As the result of erosion and sloughing of the streambanks along the Twenty Mile Creek in Mississippi, corrective measures along Twenty Mile Creek in Lee, Itawamba, and Prentiss Counties between mile 11.7 and mile 22.0, were authorized by the Supplemental Appropriation and Recision Act of 1980. Bank stabilization works have been completed along Twenty Mile Creek (mile 11.7 to 22.0) to control serious erosion problems.

SEPARABLE ELEMENT LUXAPALILA CREEK WITHOUT THE FLOOD WARNING SYSTEM.

Estimated Federal Cost		$16,437,000
Estimated Non-Federal Cost		2,483,000
Cash Contributions	$ 813,000	
Other Costs	1,670,000	
Total Estimated Project Cost		$18,920,000

Remaining Benefit-Remaining Cost Ratio: 4.8 to 1 at 3 percent.

Total Benefit-Cost Ratio: 2.0 to 1 at 3 percent.

APPROPRIATION TITLE: Construction, General - Local Protection Projects (Flood Control)

PROJECT: Carolina Beach and Vicinity, North Carolina (Continuing)

LOCATION: The project is located in New Hanover County, about 15 miles southeast of Wilmington, North Carolina, on the peninsula which separates the lower Cape Fear River from the Atlantic Ocean.

DESCRIPTION: The project consists of two separable elements, the Carolina Beach Portion and Area South of Carolina Beach and provides for construction of a dune with a crown width of 25 feet at elevation 13.5 feet National geodetic vertical datum (NGVD), a berm with a crown width of 50 feet at elevation 10.5 feet NGVD for Carolina Beach and 9 feet NGVD for the Area South, a rock revetment at elevation 10.5 feet NGVD along the northern 2,050 feet fronted by a 130 foot wide berm at elevation 6.5 feet NGVD, and Federal participation in the cost of beach nourishment for a period not to exceed 50 years from year of initial placement. Total length of project is 32,000 feet. A reevaluation report was completed which determined that future nourishment on the Carolina Beach Portion should be continued for 50 years in accordance with the Water Resources Development Act of 1986. All work is programmed.

AUTHORIZATION: Flood Control Act of 1962.

REMAINING BENEFIT - REMAINING COST RATIO: The remaining benefit-remaining cost ratio for the Carolina Beach Portion is not applicable because the initial construction has been completed. The remaining benefit-remaining cost ratio for the Area South of Carolina Beach is 1.9 to 1 at 8-1/4 percent.

TOTAL BENEFIT - COST RATIO: 1.6 to 1 at 8-1/4 percent (Carolina Beach); 1.8 to 1 at 8-1/4 percent (Area South)

INITIAL BENEFIT - COST RATIO: 3.2 to 1 at 3 percent (FY 1965).

BASIS OF BENEFIT - COST RATIO: Benefits for the Carolina Beach portion are based on the December 1992 Section 934 Reevaluation Report at April 1992 price levels. Hurricane damage prevention benefits for the Area South are based on the Design Memorandum Supplement scheduled to be approved in June 1993 at October 1992 price levels.

SUMMARIZED FINANCIAL DATA			STATUS (1 Jan 1995)	PERCENT COMPLETE	PHYSICAL COMPLETION SCHEDULE
Estimated Federal Cost		$185,480,000	Carolina Beach Portion	30	Being determined
Initial Construction	$ 19,587,000		Area South	1	Being determined
Periodic Nourishment	165,893,000		Entire Project	7	Being determined

SUMMARIZED FINANCIAL DATA - Continued

				ACCUM. PCT. OF EST. FED. COST
Estimated Non-Federal Cost			$101,715,000	
Initial Construction		$ 11,027,000		
Cash Contributions	$10,454,000			
Other Costs	573,000			
Periodic Nourishment		90,688,000		
Cash Contributions	90,264,000			
Other Costs	424,000			
Total Estimated Project Cost			$287,195,000	
Initial Construction		30,614,000		
Future Nourishment		256,581,000		
Allocations to 30 September 1994			$ 12,207,000	
Conference Allowance for FY 1995			2,800,000	
Allocation for FY 1995			2,800,000 1/	
Allocation through FY 1995			15,007,000	8
Allocation Requested for FY 1996			3,300,000	10
Programmed Balance to Complete After FY 1996			167,173,000	
Unprogrammed Balance to Complete After FY 1996			0	

1/Reflects $85,000 in programmed carryover into FY 96.

PHYSICAL DATA

Carolina Beach Portion:

	Dune	Integral Berm	Stone Revetment	Frontal Berm
Elevation	13.5 feet above NGVD	10.5 feet above NGVD	10.5 feet above NGVD	6.5 feet above NGVD
Crown Width	25 feet	50 feet		
Length	14,000 feet	14,000 feet	2,050 feet	2,050 feet

PHYSICAL DATA (Continued):

Area South of Carolina Beach:

	Dune	Integral Berm
Elevation	13.5 feet above NGVD	9 feet above NGVD
Crown Width	25 feet	50 feet
Length	18,000 feet	18,000 feet

JUSTIFICATION: The project will provide improvements for hurricane protection, beach erosion control, and recreation in the urban area of the towns of Carolina Beach and Kure Beach, North Carolina. These areas experienced heavy hurricane flood damages in the hurricanes of 1944, 1954, 1955, and 1958. Hurricane Hazel, the maximum hurricane of record, which occurred in 1954, caused $4,664,000 and $1,218,000 in damages to Carolina Beach and Kure Beach, respectively, based on 1954 price levels. A recurrence of this type hurricane at present price levels (October 1994) and July 1973 development would cause damages of $40,323,000 to Carolina Beach, and $34,917,000 in damages at October 1994 price levels and January 1993 development to Kure Beach. Average annual benefits are as follows:

Annual Benefits	Amount
Hurricane Damage Prevention	$10,159,600
Recreation	482,300
Total	$10,641,900

FISCAL YEAR 1996: The total program amount, including the requested and programmed carryover amounts of $3,300,000 and $85,000, respectively, will be applied as follows:

Real Estate Planning for Area South	$ 52,000
Initiate Initial Nourishment for Area South	2,952,000
Planning, Engineering and Design for Area South	180,000
Construction Management for Area South	201,000
Total	$3,385,000

NON-FEDERAL COST: Carolina Beach - The actual cost to the town of Carolina Beach, North Carolina, the local sponsor for the Carolina Beach portion, of complying with the requirements of local cooperation for initial construction of the project and the completed future nourishment as set forth in the authorizing legislation was $7,315,000. In accordance with the cost sharing and financing concepts reflected in the Water Resources Development Act of 1986, the non-Federal sponsor must comply with the requirements listed below for the remaining future nourishment.

Requirements of Local Cooperation	Payments During Construction and Reimbursements	Annual Operation, Maintenance, Repair Rehabilitation and Replacement Costs
Provide lands, easements, rights of way, including borrow areas.	$ 424,000	
Pay 35 percent of the first costs and future nourishment allocated to hurricane and storm damage reduction and bear all costs of operation, maintenance and replacement of hurricane and storm damage reduction facilities.	14,076,000	$ 95,000
Total Non-Federal Costs - Future Nourishment	$14,500,000	$ 95,000

Area South of Carolina Beach - In accordance with the cost sharing and financing concepts reflected in the Water Resource Development Act of 1986, the town of Kure Beach, North Carolina, as non-Federal sponsor for the Area South of Carolina Beach, must comply with the requirements listed below.

Provide lands, easements, rights of way, including borrow areas	$ 573,000	
Pay 35 percent of the first costs and future nourishment allocated to hurricane and storm damage reduction and bear all costs of operation, maintenance and replacement of hurricane and storm damage reduction facilities.	79,327,000	$100,000
Total Non-Federal Costs	$ 79,900,000	$100,000

STATUS OF LOCAL COOPERATION: The Town of Carolina Beach has complied with all the terms of local cooperation to date including three increments of periodic nourishment. On 1 November 1983, a local occupancy tax went into effect in New Hanover County. Seventy-five percent of the revenues collected from this tax must be used for beach erosion control. A Section 221 local assurance agreement was not required since the project was under construction prior to 1 January 1972.

STATUS OF LOCAL COOPERATION (Continued):

Since continuation of future nourishment is feasible, a Project Cooperation Agreement was executed in July 1994. No construction work has been done on the Area South of Carolina Beach portion. The North Carolina Department of Water and Air Resources advised in 1968 that local interests were unable to provide their share of non-Federal cash contribution toward construction, and between 1968 and 1974, local interests had not expressed interest in the project or any willingness or ability to comply with local cooperation requirements. As a result, the Area South of Carolina Beach was reclassified to the inactive category. Due to increased development, the Town of Carolina Beach expressed interest in the Wilmington Beach portion of the project and indicated that it would be able to provide the local sponsorship required as stated by a letter dated 18 February 1985. The Area South of Carolina Beach, including Wilmington and Kure Beaches, was reclassified to the active category on 6 June 1985. Kure Beach, which is adjacent to and South of Wilmington Beach, has expressed interest in sponsoring the entire Area South of Carolina Beach, including Wilmington and Kure Beaches, and indicated that it would be able to provide the local sponsorship required as stated by letter dated September 20, 1990. A project cooperation agreement is scheduled to be executed in March 1995.

COMPARISON OF FEDERAL COST ESTIMATES: The current Federal (Corps) cost estimate of $185,480,000 is a decrease of $13,500,000 from the latest estimate ($198,980,000) presented to Congress (FY 1995). This change includes the following items.

Item	Amount
Price Escalation on Construction Features - Area South	-$ 13,500,000
Total	-$ 13,500,000

STATUS OF ENVIRONMENTAL IMPACT STATEMENT: A draft Environmental Impact Statement (EIS) was filed with CEQ 15 November 1974. A revised draft EIS was filed on 17 April 1981 and a final EIS was filed on 17 July 1981 for the Carolina Beach Portion. The draft EIS for the Area South of Carolina Beach was filed with EPA in November 1992 and the final was filed in June 1993.

OTHER INFORMATION: Funds to initiate preconstruction planning were appropriated in FY 1964 and funds to initiate construction were appropriated in FY 1965. Kure Beach and the adjoining area have experienced considerable erosion since the fall of 1985. An economic reevaluation of the Area South of Carolina Beach was approved by HQUSACE in November 1990 and determined that it is feasible to pursue construction of the Area South. A reevaluation report for continuation of Federal participation in future nourishment for the Carolina Beach portion in accordance with Section 934 of WRDA 1986, was approved in January 1994.

Carolina Beach Portion

SUMMARIZED FINANCIAL DATA FOR PROGRAMMED SEPARABLE ELEMENTS:

Estimated Federal Cost			$36,980,000
Initial Construction		$ 6,987,000	
Periodic Nourishment		29,993,000	
Estimated Non-Federal Cost			$21,815,000
Initial Construction		$ 4,227,000	
Cash Contributions	$4,227,000		
Other Costs	0		
Periodic Nourishment		17,588,000	
Cash Contributions	17,164,000		
Other Costs	424,000		
Total Estimated Project Cost			58,795,000
Initial Construction		11,214,000	
Future Nourishment		47,581,000	

REMAINING BENEFIT-REMAINING COST RATIO FOR PROGRAMMED SEPARABLE ELEMENTS: Not applicable because the initial construction has been completed.

TOTAL BENEFIT-COST RATIO FOR PROGRAMMED SEPARABLE ELEMENTS: 1.6 TO 1 at 8-1/4 percent.

Area South of Carolina Beach

SUMMARIZED FINANCIAL DATA FOR PROGRAMMED SEPARABLE ELEMENTS:

Estimated Federal Cost		$148,500,000
Initial Construction	$ 12,600,000	
Periodic Nourishment	135,900,000	

Area South of Carolina Beach (Continued):

Estimated Non-Federal Cost			79,900,000
Initial Construction		6,800,000	
Cash Contributions	$ 6,227,000		
Other Costs	573,000		
Periodic Nourishment		73,100,000	
Cash Contributions	73,100,000		
Other Costs	0		
Total Estimated Project Cost			$228,400,000
Initial Construction		$ 19,400,000	
Future Nourishment		209,000,000	

REMAINING BENEFIT-REMAINING COST RATIO FOR PROGRAMMED SEPARABLE ELEMENTS: 1.9 to 1 at 8-1/4 percent.

TOTAL BENEFIT-COST RATIO FOR PROGRAMMED SEPARABLE ELEMENTS: 1.8 to 1 at 8-1/4 percent.

APPROPRIATION TITLE: Construction, General - Local Protection Projects (Flood Control)

PROJECT: Portugues and Bucana Rivers, Puerto Rico (Continuing)

LOCATION: The improvements are in and near Ponce on the Portugues and Bucana Rivers on the south coast of Puerto Rico.

DESCRIPTION: The project provides for two multiple-purpose reservoirs for flood control, water supply, general recreation, and fish and wildlife enhancement; enlargement of 5.7 miles of Bucana River and 2 miles of Portugues River; a 1.3 mile diversion channel connecting the Portugues River to lower Bucana River; and debris basins at the Bucana and Portugues Rivers. All work is programmed except the water supply increment of Portugues Dam.

AUTHORIZATION: Flood Control Act of 1970 and Water Resources Development Act of 1986.

REMAINING BENEFIT - REMAINING COST RATIO: 4.4 to 1 at 5 5/8 percent.

TOTAL BENEFIT - COST RATIO: 1.4 to 1 at 5 5/8 percent.

INITIAL BENEFIT - COST RATIO: 1.6 to 1 at 5 5/8 percent (FY 1975).

BASIS OF BENEFIT - COST RATIO: Benefits are from the July 1973 Design Memorandum Phase 1, Plan Formulation and Site Selection Report at July 1973 prices levels except for Portugues Dam where benefits are from the March 1990 Economic Reanalysis Report at January 1990 price levels.

SUMMARIZED FINANCIAL DATA			ACCUM PCT. OF EST. FED COST
Estimated Total Appropriation Requirement		415,700,000	
Programmed Construction	415,917,000		
Unprogrammed Construction	(217,000)		
Future Non-Federal Reimbursement		66,360,000	
Programmed Construction	66,360,000		
Unprogrammed Construction	0		
Estimated Federal Cost (Ultimate)		349,340,000	
Programmed Construction	349,123,000		

STATUS (1 Jan 1995)	PERCENT COMPLETE	PHYSICAL COMPLETION SCHEDULE
Channels and Canals		
Lower Channels	100	Aug 1978
Upper Bucana Channel	100	Jun 1983
Upper Portugues Channel	95	Aug 1997
Bucana River Debris Basin	100	Jun 1987
Portugues Debris Basin	70	Feb 1996
Dams		
Cerrillos	95	Aug 1997
Portugues (Flood Control)	0	Being determined
Portugues (Water Supply)	0	Indefinite

Division: South Atlantic District: Jacksonville Portugues and Bucana Rivers, PR

6 February 1995

SUMMARIZED FINANCIAL DATA (Continued)				ACCUM PCT. OF EST. FED COST	STATUS (1 Jan 1995)	PERCENT COMPLETE	PHYSICAL COMPLETION SCHEDULE
Estimated Federal Cost (Ultimate)			349,340,000				
Programmed Construction		349,123,000					
Unprogrammed Construction		(217,000)					
Estimated Non-Federal Cost			206,260,000		Recreation		
Programmed Construction		186,088,000			Channels	45	Being determined
Cash Contributions	25,278,000				Cerrillos	0	Being determined
Other Costs	94,450,000				Portugues	0	Being determined
Reimbursement							
Water Supply	66,360,000				Entire Project	79	Being determined
Unprogrammed Construction		20,172,000					
Cash Contribution	20,172,000						
Other Costs	0						
Reimbursement	0						
Total Estimated Programmed Construction Cost			535,645,000				
Total Estimated Unprogrammed Construction Cost			19,955,000				
Total Estimated Project Cost			555,600,000				
Allocations to 30 September 1994			331,978,000				
Conference Allowance for FY 1995			12,100,000				
Allocation for FY 1995			10,185,000 1/				
Allocations through FY 1995			342,163,000	82			
Allocation Requested for FY 1996			12,451,000	85			
Programmed Balance to Complete After FY 1996			73,754,000				
Unprogrammed Balance to Complete After FY 1996			(217,000)				

1/ Reflects reduction of $1,915,000 assigned as savings and slippage.

PHYSICAL DATA

Dam	Portugues River	Cerrillos River
Type	Concrete arch	Earth and rock-filled
Height	272 feet	323 feet
Crest Length	1,500 feet	1,555 feet
Spillway Type	Ungated concrete ogee 150 feet wide	Ungated rock cut 400 feet wide
Reservoir Capacity (Acre-Feet)		
Flood Control	8,342	17,065
Water Supply	14,000	25,200
Sediment	2,841	5,635
Total	25,183	47,900

Portugues River Channel Enlargement	2.1 miles
Bucana River Channel Enlargement	5.7 miles
Diversion Channel connecting Portugues River to the Lower Bucana River	1.3 miles

JUSTIFICATION: The mountainous terrain above Ponce permits rapid runoff into the rivers which overflow in the lower elevation flood plains in Ponce causing loss of life and extensive property damage. The 1954 flood caused damages of $1,297,000 ($6,991,000 at 1989 price levels). Minor flooding occurs almost yearly and major floods occur every 5 years on the average. Other major damaging floods occurred in 1961 ($4,931,000 at 1989 price levels), 1970 ($2,176,000 at 1989 price levels), 1975 ($35,253,000 at 1989 price levels), and 1985 ($33,517,000 at 1989 price levels). The average degree of protection provided by the completed project will be the standard project flood frequency. Upon completion, 6,415 acres will be protected, including 4,310 agricultural acres, 1,855 urban acres, and 250 acres which are undeveloped. Present value of property subject to flood damages is $624,069,000. Average annual flood damages prevented are all attributable to existing urban development. Water supply is also a need that will be met by the Portugues and Bucana Rivers project. The water storage capacity in Lake Cerrillos is 25,200 acre-feet while ongoing studies have established a preliminary capacity for Lake Portugues of 14,000 acre-feet. Primary uses of the water supply will be municipal and industrial.

Division: South Atlantic

District: Jacksonville

6 February 1995

Portugues and Bucana Rivers, PR

JUSTIFICATION (Continued): Average annual benefits are as follows:

Item	Amount
Flood Control	49,456,000
Water Supply	15,220,000
Recreation	2,634,000
Area Redevelopment	1,271,000
Total	65,881,000

FISCAL YEAR 1996: The requested amount will be applied as follows:

Complete Channel Debris Basins	$ 2,610,000
Continue Shoal Removal Phase I, Channels	300,000
Initiate Shoal removal Phase II, Channels	948,000
Complete Lower Bucana Beach Recreation Construction	1,007,000
Initiate Portugues Dam Recreational Lands	90,000
Continue Cultural Resource Study on Portugues Dam & Channels	376,000
Continue Cerrillos Dam Recreation Construction	500,000
Initiate Portugues Grouting Investigations	3,797,000
Planning, Engineering and Design	951,000
Construction Management	1,372,000
Continue Cerrillos Access Rd./Spillway Bridge	500,000
Total	$ 12,451,000

NON-FEDERAL COST: In accordance with the cost sharing and financing concepts reflected in the Flood Control Act of 1970 and the Water Resources Act of 1986, the non-Federal sponsor must comply with the requirements listed below.

Requirements of Local Cooperation	Payments During Construction and Reimbursements	Annual Operation, Maintenance, and Replacement Costs
Provide lands, easements, and rights-of-way.	73,050,000	
Modify or relocate buildings, utilities, roads, bridges, and other facilities, where necessary in the construction of the project.	19,838,000	
Pay 16.4 percent of the costs allocated to flood control for the Portugues Dam to bring the total non-Federal share of flood control costs to 25 percent and bear all costs of operation, maintenance, and replacement of flood control facilities.	16,102,000	249,900
Pay one-half of the separable costs allocated to recreation and bear all costs of operation, maintenance, and replacement of recreation facilities.	9,801,000	258,300
Pay all costs allocated to municipal and industrial water supply and bear all costs of operation, maintenance, and replacement of municipal and industrial water supply facilities.	21,109,000	85,700
Total	139,900,000	593,900

STATUS OF LOCAL COOPERATION: The Commonwealth of Puerto Rico Department of Natural and Environmental Resources is the local sponsor. The following contract agreements are required pursuant to Section 221 of the River and Harbor and Flood Control Act of 1970 and the Water Resources Development Act of 1986:

Contract		Actual or Anticipated Execution Date
Section 221 -	Cerrillos Reservoir	15 March 1982
	Channels	22 July 1974
Water Supply -	Cerrillos Reservoir	15 March 1982
Recreation -	Cerrillos Reservoir	15 March 1982
	Channels	24 June 1987
Project Cooperation Agreement -	Portugues Reservoir	9 August 1993

Portugues Dam is a concrete elliptical arch dam, curved in both the vertical and horizontal planes. The dam is designed as a multi-purpose dam to be constructed in two phases. The Commonwealth of Puerto Rico has requested that the dam be constructed as soon as possible for flood control and recreation, but to defer the water supply feature to a later date. By letter dated 15 November 1991, the Commonwealth restated their commitment to the full and complete multi-purpose Portugues Dam, and agreed to pay the additional costs required for the phased construction.

COMPARISON OF FEDERAL COST ESTIMATES: The current Federal (Corps) cost estimate of $415,700,000 is an increase of $4,800,000 over the latest estimate ($410,900,000) presented to Congress (FY 1995). This change includes the following.

Item	Amount
Price Escalation on Construction Features	47,000
Post Contract Award and Other Estimating Adjustments	1,541,000
Schedule Changes	3,212,000
Total	$ 4,800,000

STATUS OF ENVIRONMENTAL IMPACT STATEMENT: The final EIS was filed with CEQ on 25 February 1974. A Supplemental EIS for the Portugues Dam was submitted in November 1992.

OTHER INFORMATION: Funds to initiate preconstruction planning were appropriated in Fiscal Year 1972. Funds to initiate construction were appropriated in Fiscal Year 1975.

SUMMARIZED FINANCIAL DATA FOR PROGRAMMED SEPARABLE ELEMENTS:

Channels and Canals

Estimated Federal Cost		109,291,000
Estimated Non-Federal Cost		61,609,000
Cash Contributions	3,499,000	
Other Costs	58,110,000	
Total Estimated Project Cost		170,900,000

REMAINING BENEFIT-REMAINING COST RATIO: Not applicable because construction is substantially complete.

TOTAL BENEFIT-COST RATIO: 6.5 to 1 at 5 5/8 percent.

Cerrillos Dam

Estimated Total Appropriation Requirement		222,827,000
Future Non-Federal Reimbursement (Water Supply)		66,360,000
Estimated Federal Cost (Ultimate)		156,467,000
Estimated Non-Federal Cost		93,533,000
Cash Contributions	3,293,000	
Other Costs	23,880,000	
Reimbursement: Water Supply	66,360,000	
Total Estimated Project Cost		250,000,000

REMAINING BENEFIT-REMAINING COST RATIO: Not applicable because construction is substantially complete.

TOTAL BENEFIT-COST RATIO: 6.5 to 1 at 5 5/8 percent.

Portugues Dam

Estimated Total Appropriation Requirement			83,582,000
Programmed Construction		83,799,000	
Unprogrammed Construction		(217,000)	

SUMMARIZED FINANCIAL DATA FOR PROGRAMMED SEPARABLE ELEMENTS (Continued):

Estimated Non-Federal Cost			51,118,000
Programmed Construction		30,946,000	
Cash Contributions	18,486,000		
Other Costs	12,460,000		
Unprogrammed Construction		20,172,000	
Cash Contributions	20,172,000		
Other Costs	0		

Total Estimated Programmed Construction Cost	119,728,000
Total Estimated Unprogrammed Construction Cost	20,172,000
Total Estimated Project Cost	139,900,000

REMAINING BENEFIT-REMAINING COST RATIO: 3.9 to 1 at 8 1/4 percent.

TOTAL BENEFIT-COST RATIO: 3.9 to 1 at 8 1/4.

APPROPRIATION TITLE: Construction, General - Local Protection Project (Flood Control)

PROJECT: Rio de La Plata, Puerto Rico (Continuing)

LOCATION: The Rio de La Plata basin drains an area of approximately 240 square miles at a point 11 miles west of San Juan. This area includes all or part of the municipalities of Dorado, Toa Baja, Toa Alta, Camerio, Cedra, Cayey, Arbonito and Barranquitas. The total population of the basin is approximately 290,000 people.

DESCRIPTION: The proposed plan calls for 7.0 miles of channel excavation and improvements, 7.6 miles of levees along both sides of the river, 8 ponding areas, wetland mitigation, recreation facilities, and the replacement of 3 bridges. The project is designed to provide 100-year flood protection for the areas south of Highway 2 and the area surrounding El Polvorin. All work is programmed.

AUTHORIZATION: Water Resources Development Act of 1990.

REMAINING BENEFIT - REMAINING COST RATIO: 1.6 to 1 at 8 percent.

TOTAL BENEFIT - COST RATIO: 1.6 to 1 at 8 percent (FY 1995).

BASIS OF BENEFIT - COST RATIO: Benefits are from the economic analyses performed for the April 1992 Limited Reevaluation Report (LRR), revised in June 1992 at April 1992 price levels.

SUMMARIZED FINANCIAL DATA			ACCUM. PCT OF EST FED COST	STATUS (1 Jan 1995)	PERCENT COMPLETE	COMPLETION SCHEDULE
Estimated Federal Cost		$62,400,000				
Estimated Non-Federal Cost		31,500,000		Relocations - Bridges	0	Being determined
Cash Contributions	5,036,000			Channels and Canals	0	Being determined
Other Costs	26,464,000			Levees and Floodwalls	0	Being determined
				Recreation	0	Being determined
Total Estimated Project Costs		93,900,000		Floodway Control and Diversion Structures	0	Being determined
				Entire Project	0	Being determined

SUMMARIZED FINANCIAL DATA (Continued)

Allocations to 30 September 1994	$ 3,339,000	
Conference Allowance for FY 1995	350,000	
Allocation for FY 1995	295,000 1/	
Allocations through FY 1995	3,634,000	6
Allocation Requested for FY 1996	250,000	6

Programmed Balance to Complete After FY 1996	58,516,000
Unprogrammed Balance to Complete After FY 1996	0

1/ Reflects reduction of $55,000 assigned as savings and slippage.

PHYSICAL DATA

Relocations - Bridges (Replacement)	3
Levees-Miles	7.6
Canals - Miles	7
Ponding Areas	8
Wetlands Mitigation - Acres	15
Recreation Areas	3

JUSTIFICATION: Heavy rainfall combined with the very steep slopes of the upper basin produces high discharges in a relatively short time. Flooding in the area affects over 12,300 families and numerous public buildings and commercial facilities. The area has been declared a flood disaster area by the President six times since 1974. The most recent flood occurred in January 1992 which damaged numerous commercial structures, public facilities and about 3,000 homes and resulted in the loss of two lives. The average annual rainfall is about 71 inches. Average annual benefits are as follows:

Item	Amount
Flood Control	$ 11,080,000
Redevelopment	1,286,000
Recreation	733,000
Total Annual Benefits	$ 13,099,000

FISCAL YEAR 1996: The requested amount will be applied as follows:

Planning, Engineering, and Design	$ 250,000
Total	$ 250,000

NON-FEDERAL COST: In accordance with the cost sharing and financing concepts reflected in the authorizing legislation, the non-Federal sponsor must comply with the requirements listed below for programmed work.

Requirements of Local Cooperation	Payments During Construction, and Reimbursements	Annual Operation, Maintenance, and Replacement Costs
Provide lands, easements, rights of way, and dredged material disposal areas.	$ 9,736,000	
Modify or relocate buildings, utilities, roads, bridges (except railroad bridges), and other facilities, where necessary in the construction of the project.	16,728,000	
Pay one-half of the separable costs allocated to recreation and bear all costs of operation, maintenance, and replacement of recreation facilities.	436,000	
Pay 5.0 percent of the first costs allocated to flood control, and bear all cost of operation, maintenance, and replacement of flood control structures.	4,600,000	
Total non-Federal payments during construction.	$ 31,500,000	$367,000

The non-Federal sponsor has also agreed to make all required payments concurrently with project construction.

STATUS OF LOCAL COOPERATION: The Commonwealth of Puerto Rico Department of Natural and Environmental Resources is the local sponsor. A PCA for the project is scheduled for execution in April 1995.

COMPARISON OF FEDERAL COST ESTIMATES: The current Federal (Corps of Engineers) cost estimate of $62,400,000 is an increase of $400,000 over the latest estimate of $62,000,000 submitted to Congress (FY 1995). This change includes the following items:

Item	Amount
Price Escalation on Construction Features	- $ 2,112,000
Post Contract Award and Other Estimating Adjustments (including contingency adjustments)	-5,000
Schedule Changes	2,517,000
Total	$ 400,000

STATUS OF ENVIRONMENTAL IMPACT STATEMENT: The final Environmental Impact Statement for the project was filed in September 1988. The FONSI was signed in April 1993.

OTHER INFORMATION: Funds to initiate planning, engineering, and design were appropriated in Fiscal Year 1990. Funds to initiate construction were appropriated in Fiscal Year 1995.

APPROPRIATION TITLE: Construction, General - Local Protection Project (Flood Control)

PROJECT: Rio Puerto Nuevo, Puerto Rico (Continuing)

LOCATION: The Rio Puerto Nuevo drainage basin is located within the San Juan Metropolitan Area along the northern coast of Puerto Rico. The basin joins the southeast side of San Juan Harbor and extends south and up into the foothills of the central mountains of Puerto Rico. The basin is traversed by the Rio Piedras, Rio Puerto Nuevo, Quebrada Margarita, Quebrada Josefina, Quebrada Dona Ana, Quebrada Buena Vista, and Quebrada Guaracanal.

DESCRIPTION: The proposed plan calls for improvements to 11.2 miles of the existing channel of Rio Puerto Nuevo and Rio Piedras and five tributaries of the Rio Puerto Nuevo drainage basin. The project is designed to provide 100-year flood protection for the areas adjacent to the Puerto Nuevo and its tributaries. All work is programmed.

AUTHORIZATION: Water Resources Development Act of 1986.

REMAINING BENEFIT - REMAINING COST RATIO: 2.4 to 1 at 8 1/2 percent.

TOTAL BENEFIT - COST RATIO: 2.4 to 1 at 8 1/2 percent. (FY 1994)

BASIS OF BENEFIT - COST RATIO: Benefits are from the economic analyses performed for the revised General Design Memorandum dated June 1991 at November 1990 price levels.

SUMMARIZED FINANCIAL DATA			ACCUM. PCT OF EST FED COST	STATUS (1 Jan 1995)	PERCENT COMPLETE	PHYSICAL COMPLETION SCHEDULE
Estimated Federal Cost		$305,500,000				
Estimated Non-Federal Cost		102,100,000		Relocations - Bridges	0	Being determined
Cash Contributions	48,230,000			Channels and Canals	0	Being determined
Other Costs	53,870,000			Recreation	0	Being determined
Total Estimated Project Costs		407,600,000				
Allocations to 30 September 1994		$ 8,782,000		Entire Project	0	Being determined
Conference Allowance for FY 1995		10,400,000				

Division: South Atlantic District: Jacksonville Rio Puerto Nuevo, PR

6 February 1995

SUMMARIZED FINANCIAL DATA (Continued)

Allocation for FY 1995	6,889,000 1/	
Allocations through FY 1995	15,671,000	5
Allocation Requested for FY 1996	7,000,000	7
Programmed Balance to Complete After FY 1996	$ 282,829,000	
Unprogrammed Balance to Complete After FY 1996	0	

1/ Reflects $1,646,000 reduction for savings and slippage, $1,865,000 reprogrammed from the project, and $3,614,000 in programmed carryover into FY 96.

PHYSICAL DATA		
	Relocations - Bridges (Replacement)	17
	Bridges (Modification)	8
	Bridges (Construction)	5
	Canals - Miles	11.2
	Debris Basins	2
	Stilling Areas	2

JUSTIFICATION: The intense development in the basin has altered the natural discharge patterns, significantly increased the runoff rates and restricted the flows in the flood plain. There are over 240,000 people living in the 25 square mile drainage basin. The area is over 75% developed and is expected to be 100% developed by the year 2000. Development has progressed to the point where some of the tributary channels are not capable of carrying the two-year storm without causing flooding. Over 5,700 families would be subject to flooding from the 100-year storm under existing conditions. The average annual rainfall is about 71 inches. Average annual benefits are as follows:

Item	Amount
Inundation Reduction	$ 36,644,000
Location	2,505,000
Redevelopment	1,633,000
Advance Bridge Replacement	193,000
Intensification	30,949,000
Recreation	810,000
Total Annual Benefits	$ 72,734,000

FISCAL YEAR 1996: The total program amount, including the requested and programmed carryover amounts of $7,000,000 and $3,614,000 will be applied as follows:

Roads, Railroads and Bridges	$ 2,680,000
Channels and Canals	4,225,000
Planning, Engineering, and Design	1,360,000
Supervision and Administration	2,349,000
Total	$10,614,000

NON-FEDERAL COST: In accordance with the cost sharing and financing concepts reflected in the authorizing legislation, the non-Federal sponsor must comply with the requirements listed below for programmed work.

Requirements of Local Cooperation	Payments During Construction and Reimbursements	Annual Operation, Maintenance Repair, Rehabilitation, and Replacement Costs
Provide lands, easements, rights of way, and dredged material disposal areas.	$ 20,515,000	
Modify or relocate buildings, utilities, roads, bridges (except railroad bridges), and other facilities, where necessary in the construction of the project.	25,939,000	
Pay one-half of the separable costs allocated to recreation and bear all costs of operation, maintenance, and replacement of recreation facilities.	330,000	
Pay 13.57 percent of the first costs allocated to flood control, and bear all cost of operation, maintenance, repair, rehabilitation, and replacement of flood control structures.	55,316,000	
Total non-Federal payments during construction.	$102,100,000	$377,000

STATUS OF LOCAL COOPERATION: The Commonwealth of Puerto Rico Department of Natural and Environmental Resources is the local sponsor. A Project Cooperation Agreement for the project was executed in March 1994.

COMPARISON OF FEDERAL COST ESTIMATES: The current Federal (Corps) cost estimate of $305,500,000 the same as the latest estimate ($305,500,000) presented to Congress (FY 1995). Internal changes are as follows:

Item	Amount
Price Escalation on Construction Features	$ -11,213,000
Post Contract Award and Other Estimating Adjustments (including contingency adjustments)	7,691,000
Schedule Changes	3,522,000
Total	$ 0

STATUS OF ENVIRONMENTAL IMPACT STATEMENT: The final Environmental Impact Statement for the project was filed on 6 December 1985. The Finding of No Significant Impact (FONSI) was approved in July 1992.

OTHER INFORMATION: Funds to initiate preconstruction, engineering and design were appropriated in Fiscal Year 1987. Funds to initiate construction were appropriated in Fiscal Year 1994.

APPROPRIATION TITLE: Construction, General - Local Protection (Flood Control)

PROJECT: Roanoke River Upper Basin, Virginia, Headwaters Area (Continuing)

LOCATION: The project is located on the Roanoke River in the City of Roanoke, Virginia.

DESCRIPTION: The project includes about 6.4 miles of channel widening along the 10 miles of river through the City of Roanoke, Virginia. Channel widening will be accomplished with the construction of a benched channel above the elevation of the average streamflow. Other flood damage reduction features include floodproofing at two locations, training walls to prevent floodwater intrusion into low areas along the river, replacement of two low-level bridges which constrict streamflows, and a flood warning system. Recreation facilities consist of a 5-mile recreation trail along the project reach and access and parking areas. All work is programmed.

AUTHORIZATION: Water Resources Development Act of 1986 and Energy and Water Development Appropriation Act of 1990.

REMAINING BENEFIT - REMAINING COST RATIO: 1.9 to 1 at 8-7/8 percent.

TOTAL BENEFIT - COST RATIO: 1.17 to 1 at 8-7/8 percent.

INITIAL BENEFIT - COST RATIO: 1.3 to 1 at 8-7/8 percent (FY 1990).

BASIS OF BENEFIT - COST RATIO: Benefits are from the General Design Memorandum approved in January 1990 at 1988 price levels.

SUMMARIZED FINANCIAL DATA		
Estimated Federal Cost		$23,600,000
Estimated Non-Federal Cost		14,600,000
Cash Contributions	$ 3,598,000	
Other Costs	11,002,000	
Total Estimated Project Cost		$38,200,000

STATUS (1 Jan 1995)	PERCENT COMPLETE	PHYSICAL COMPLETION SCHEDULE
Entire Project	17	Being determined

SUMMARIZED FINANCIAL DATA (Continued)

		ACCUM. PCT. OF EST. FED. COST
Allocations to 30 September 1994	$ 4,337,000	
Conference Allowance for FY 1995	800,000	
Allocation for FY 1995	436,000 1/	
Allocations through FY 1995	4,773,000	20
Allocation Requested for FY 1996	400,000	22
Programmed Balance to Complete After FY 1996	18,427,000	
Unprogrammed Balance to Complete After FY 1996	0	

1/ Reflects $127,000 reduction for savings and slippage, $237,000 reprogrammed from the project, and $161,000 in programmed carryover into FY 96.

PHYSICAL DATA

Project Features:		Relocations:	
Channel Excavation	34,000 linear feet	Utility	3,880 linear feet
Training Wall	7,200 linear feet	Roads	2,000 linear feet
Paved Recreation Trail	25,900 linear feet	Overhead Line	6,350 linear feet
Parking/Access Areas	4 each	Buildings	13 each
Riprap	34,310 tons	Bridges	2 each

Land Acquisition (acres):	
Total Rights of Way Requirement	295
Flood Control Rights of Way	185
Disposal Areas (Temporary)	40
Recreation Rights of Way (Separable)	20
Rights of Way Underwater	110

JUSTIFICATION: The project will provide improvements for flood protection and recreation. Most of the property that would be protected is industrial and commercial with a value of $680,000,000. The average annual damages in the project area are estimated at $5,777,000 at October 1988 price levels and 1988 level of development over the next 50 years if no flood control facilities are provided. The project would reduce these damages by $3,073,800. The maximum flood of record, November 1985, caused damages estimated at $112,424,000 under 1985 conditions of development and price levels. Damages at current levels of development and October 1988 price levels would be $119,997,000. Floodplain development is not promoted by the project. Return on investments by local businesses is adversely affected by the flood problem. Firms have to use resources to repair and attempt floodproofing that could be used for expansion and modernization. In this respect, return on investment is suppressed. The project will have a beneficial effect on a variety of firms and increase return on investment throughout the floodplain. Average annual benefits are as follows:

Annual Benefits	Amount
Flood Damage Protection	$3,073,800
Recreation	343,800
Total	$3,417,600

FISCAL YEAR 1996: The total program amount, including the requested and programmed carryover amounts of $400,000 and $161,000, respectively, will be applied as follows:

Continue Channels	$ 75,000
Continue Cultural Resources Preservation	171,000
Planning, Engineering and Design	315,000
Total	$561,000

NON-FEDERAL COSTS: In accordance with the cost sharing and financing concepts reflected in the Water Resources Development Act of 1986, the non-Federal sponsor must comply with the requirements listed below:

Requirements of Local Cooperation	Payments During Construction and Reimbursements	Annual Operation, Maintenance, Repair, Rehabilitation and Replacement Costs
Provide all lands, easements, and rights of way including suitable spoil disposal areas	$8,161,000	

NON-FEDERAL COSTS (Continued):

Requirements of Local Cooperation (Continued)	Payments During Construction and Reimbursements	Annual Operation, Maintenance Repair, Rehabilitation and Replacement Costs
Modify or relocate buildings, utilities, roads and other facilities except railroad bridges, where necessary for construction of the project.	$2,841,000	
Pay 25 percent of the cost of the flood warning system (partially offset by a credit for lands, easements, rights of way, and relocations).	11,000	
Pay 5 percent of the total cost allocated to flood control in cash in addition to all lands, easements, rights of way and relocations, and bear all costs of operation, maintenance, and replacement of flood control facilities.	1,620,000	$101,000
Pay one-half of the separable cost allocated to recreation (partially offset by a credit for land, easements, rights of way and relocations) and bear all costs of operation, maintenance and replacement of recreation facilities.	1,601,000	9,000
Pay 25 percent of the cost of the non-structural floodproofing (partially offset by a credit for lands, easements, rights of way and relocations).	366,000	
Total Non-Federal Costs	$14,600,000	$110,000

The non-Federal sponsor has also agreed to make all required payments concurrently with project construction.

STATUS OF LOCAL COOPERATION: The City of Roanoke is the project sponsor. On 11 April 1989 the voters of the City of Roanoke approved the sale of $7.5 million worth of bonds to pay Roanoke's required cash contribution, acquire lands that are not currently owned and pay for relocation of bridges and utilities. The Local Cooperation Agreement was executed on 25 June 1990. A supplement to the Local Cooperation Agreement addressing the reimbursement for the floodproofing of the hospital was executed in January 1993.

STATUS OF LOCAL COOPERATION (Continued): The City has deferred right of way acquisition pending resolution of HTW liability concerns. The City has completed HTW investigations in areas of concern. Based on the Environmental Protection Agency's December 1994 decision that only two sites will require clean-up, right of way acquisition should begin in late FY 95.

COMPARISON OF FEDERAL COST ESTIMATES: The current Federal (Corps) cost estimate of $23,600,000 is an increase of $100,000 over the latest estimate ($23,500,000) presented to Congress (FY 1995). This change includes the following items.

Item	Amount
Post Contract Award and Other Estimating Adjustments	$100,000
Total	$100,000

STATUS OF ENVIRONMENTAL IMPACT STATEMENT: The final environmental impact statement was filed with the Environmental Protection Agency in February 1985. A Finding of No Significant Impact for design changes was signed on 30 June 1989.

OTHER INFORMATION: Funds to initiate preconstruction engineering and design were appropriated in FY 1986 and funds to initiate construction were appropriated in FY 1990. The project was modified by the Energy and Water Development Appropriations Act of 1990 to increase the total estimated project cost to $29,000,000 (October 88 price levels). The Roanoke Logperch, which is located in the project area, was listed as an endangered species effective 18 September 1989 and will be monitored during project construction.

Reimbursement for the Federal share of the floodproofing of Roanoke Hospital, as authorized by Section 102cc of the Water Resources Development Act of 1990, in the amount of $501,000, was made in February 1993.

The HTW investigations performed by the sponsor identified five potential HTW sites. In addition, the investigations indicated the presence of various contaminants in varying levels throughout the project area. The Environmental Protection Agency advised in December 1994 that clean up of only two sites will be required.

APPROPRIATION TITLE: Construction General - Multiple Purpose Power

PROJECT: Richard B. Russell Dam and Lake, Georgia and South Carolina (Continuing)

LOCATION: The Richard B. Russell Dam and Lake project is located on the Savannah River about 275 miles above the mouth, 16 miles southeast of Elberton, Georgia and between the existing J. Strom Thurmond and Hartwell Lakes.

DESCRIPTION: The project consists of a concrete gravity-type dam, flanked by earth embankments with a maximum height of 200 feet above the river. The total length of 5,616 feet consists of a 1,884 foot concrete section and embankments of 3,732 feet. The gate controlled spillway has a design capacity of 800,000 c.f.s. The project includes the installation of 345 megawatts of conventional power completed in January 1986 and 340 megawatts of reversible pumped storage power for a total available capacity of 685 megawatts. All work is programmed.

AUTHORIZATION: Flood Control Act of 1966, modified by the Water Resources Development Act of 1976 and the Water Resources Development Act of 1986.

REMAINING BENEFIT - REMAINING COST RATIO: Not applicable because project construction is substantially complete.

TOTAL BENEFIT - COST RATIO: 1.9 to 1 at 3 1/4 percent.

INITIAL BENEFIT - COST RATIO: 2.0 to 1 at 3 1/4 percent (FY 1972).

BASIS OF BENEFIT - COST RATIO: Benefits are from the cost allocation study completed in December 1991 at October 1991 price levels.

SUMMARIZED FINANCIAL DATA		ACCUM. PCT. OF EST. FED. COST	STATUS (1 Jan 1995)	PERCENT COMPLETE	PHYSICAL COMPLETION SCHEDULE
Estimated Total Appropriation Requirement	$575,000,000		Construction	98	Sep 1996
			Environmental Monitoring	0	Being determined
Future Non-Federal Reimbursement	$548,371,000		Entire Project	98	Being determined
Estimated Federal Cost (Ultimate)	$ 26,629,000				

Division: South Atlantic District: Savannah Richard B. Russell Dam and Lake, GA and SC

SUMMARIZED FINANCIAL DATA (Continued)

				ACCUM. PCT. OF EST. FED. COST
Estimated Non-Federal Cost:			$550,171,000	
Cash Contribution		$ 1,800,000		
Reimbursements		548,371,000		
Power	$529,954,000			
Recreation	18,417,000			
Total Estimated Project Cost			$576,800,000	
Allocations to 30 September 1994			$557,852,000	
Conference Allowance for FY 1995			5,977,000	
Allocation for FY 1995			11,348,000 1/	
Allocations through FY 1995			569,200,000	99
Allocation Requested for FY 1996			$ 4,400,000	100
Programmed Balance to Complete After FY 1996			1,400,000	
Unprogrammed Balance to Complete After FY 1996			0	

1/ Reflects $946,000 reduction assigned as savings and slippage and $6,317,000 reprogrammed to the project.

PHYSICAL DATA

Dam

Type	Concrete Gravity, flanked by earth embankments
Maximum Height	200 feet
Length	Concrete Section 1,884 feet; embankments 3,732 feet; total 5,616 feet

Spillway

Type	Gate Controlled
Design Capacity	800,000 c.f.s.

PHYSICAL DATA (Continued)

Relocations	
Roads - 19.5 miles	($32,537,000)
Railroads - (SCL RR) 9.1 miles	($29,921,000)
Cemeteries, Util. Lines and Water Supply Pump Stations	($ 4,966,000)

Lands and Damages
Acres - 53,112
Type - Predominantly timber and Agricultural
Improvements - Typical farm units

Initial Power Installation
4 Conventional Units @ 86 MW
4 pump Storage Units
@ 85 MW; 685 MW
Normal Average Head - 144 feet

Reservoir Capacity (Acre-feet)	
Flood Control	140,000
Power	126,800
Dead Storage	899,400
Total	1,166,200

JUSTIFICATION: The 685 megawatts installation, including pumped storage, will help meet the increased power requirements and rapid growth demands in this region. The output can be marketed and fully utilized immediately upon project completion in Federal Energy Regulatory Commission (FERC) supply areas 21, 22, and 23. This includes all of South Carolina, most of North Carolina, Georgia, Alabama, and parts of Mississippi and Florida. The FERC has stated repeatedly the need for this power source. This project will be an integral unit of the plan for development of the Savannah River Basin for flood control, navigation, power, and allied purposes. The recreational facilities will serve an area within a large zone of influence surrounding the three-lake complex of J. Strom Thurmond, Hartwell, and Richard B. Russell lakes. The estimated initial attendance at the project will approach 1,000,000 and should exceed 4,600,000 in the early 2000's. Average annual benefits are as follows:

Annual Benefits	Amount
Power	$ 52,995,000
Recreation	3,597,000
Fish and Wildlife	71,000
Flood Control	177,000
Area Redevelopment	4,212,000
Total	$ 61,052,000

FISCAL YEAR 1996: The requested amount of $4,400,000 will be applied as follows:

Complete Pumped Storage Installation	$ 300,000
Recreation Development	1,060,000
Fish & Wildlife Activities	1,380,000
Cultural Resources	40,000
Permanent Operating Equipment	45,000
Planning, Engineering and Design	1,290,000
Construction Management	285,000
Total	$ 4,400,000

NON-FEDERAL COSTS: In accordance with Public Law 89-72, agreements for recreation development with the States of Georgia and South Carolina have been executed and were approved by the Secretary of the Army 20 May 1974. The costs allocable to power are reimbursable, and will be reviewed and adjusted based on construction costs when the project becomes operational.

Requirements of Local Cooperation	Payments During Construction and Reimbursements	Annual Operation, Maintenance, and Replacement Costs
Capital Cost allocated to power.	$529,954,000	$3,557,000
Pay, contribute in kind, or repay (repayment not to exceed 50 years) with interest, one-half of the separable costs allocated to recreation.	20,217,000	
Bear all costs of operation maintenance, and replacement of recreational facilities.	0	249,000
Total Non-Federal Costs	$550,171,000	$3,806,000

STATUS OF LOCAL COOPERATION:

The State of Georgia began payments for recreation reimbursements in May 1985. The State of South Carolina began payments in August 1985. Responsibility for repayment of power costs rests with the Southeastern Power Administration pursuant to Federal Laws.

COMPARISON OF FEDERAL COST ESTIMATES: The current Federal (Corps) cost estimate of $575,000,000 is an increase of $9,000,000 over the latest estimate presented to Congress (FY 1995). This change includes the following items:

Item	
Post Contract Award and Other Estimating Adjustments (including contingency adjustments)	$9,000,000
Total	$9,000,000

STATUS OF ENVIRONMENTAL IMPACT STATEMENT: The final Environmental Impact Statement (EIS) on conventional installation was submitted to CEQ on 31 May 1974. A supplement on water quality to the final EIS was filed with CEQ in May 1976. The final EIS on pumped storage was filed with the Environmental Protection Agency (EPA) in October 1979. The Supplement on fish and wildlife mitigation to the final EIS was filed with the EPA in December 1981. A supplement to the final EIS on pumped storage was filed in August 1991.

OTHER INFORMATION: Funds to initiate preconstruction planning were appropriated in FY 1968. Funds to initiate land acquisition were appropriated in FY 1971 and were allocated in FY 1972. Initial construction funds were appropriated in FY 1975.

A preliminary injunction halting the installation of pumped storage was issued on 23 May 1988. A hearing on the merits of our appeal for injunctive relief was held on 8 December 1988 in the 4th Circuit Court of Appeals in Richmond, Virginia. On 24 January 1989, the Richmond 4th Circuit Court of Appeals granted injunctive relief to the Corps of Engineers to only install the reversible pump turbines. Testing and operation is contingent on demonstrating through the supplemental EIS process that units can be operated in a reasonable manner without unduly impacting existing fish habitat. With the record-of-decision on the Supplemental EIS, dated 4 September 1991, the Corps completed a settlement with the litigants to proceed forward into a phased testing and monitoring plan to address environmental issues concerning pumped storage. On 6 December 1991, the Federal District Court of Charleston, South Carolina, modified the pump storage injunction to permit testing of the first pumped storage unit and permit advertising of the pumped storage conveyance channel.

OTHER INFORMATION (Continued):

On 8 April 1992, the Charleston District Federal Court granted injunctive relief to allow environmental testing of the pumped storage units from May 1992 through October 1993 (subsequently from March 1993 through October 1996) and allow the award of the dredging of the tailrace channel. This schedule conforms to the Federal Court and the Corps commitment to the resource agencies as stated in the supplement to the final environmental impact statement record-of-decision. Environmental clearance for dredging was attained 27 May 1994. The dredging was tied to the phased testing process in accordance with the consent order. The Vortex Fix scheduled for unit eight was awarded in February 1994 and installation was completed in December 1994, prior to the anticipated need to enter unit eight into the phased environmental test period, which required full-scale operation using all pump back units.

The Pumped Storage will be declared commercially available following successful completion of the Phase III testing from April thru October 1995 and monitoring period in accordance with the Federal Court Consent Order.

The final EIS on pumped storage included the tailrace conveyance channel.

APPROPRIATION TITLE: Construction, General - Local Protection

PROJECT: Kissimmee River, Florida (Continuing)

LOCATION: The Kissimmee River basin is approximately 3,000 square miles in size. It stretches from the southern Orlando area southward to Lake Okeechobee in central Florida. The project to restore the Kissimmee River has two component parts; the upper basin, referred to as the Headwaters Revitalization, and the lower basin, referred to as the Kissimmee River Restoration. The upper basin is being pursued under Section 1135 of the Water Resources Development Act of 1986 and is generally located in south-central Florida north of State Road 60. The lower basin was authorized in the Water Resources Development Acts of 1988 and 1992 and is located south of the outlet from lakes Kissimmee and Hatchineha and Cypress Lake.

DESCRIPTION: The upper basin portion of the project consists of water regulation schedule modifications, canal and structure improvements, and land acquisition. This will result in environmental benefits in the upper chain of lakes and in the lower basin. More natural fluctuations of water levels will enhance the peripheral marshes of the lakes. Reestablishing a more natural timing of flows to the lower basin will result in restoration or enhancement of the Kissimmee River ecosystem. Structural improvements will include enlargements of existing canals and existing water control structures. Real estate interests will be acquired for the effected lands. In the lower basin portion of the project the existing C-38 canal was constructed along the general alignment of the meandering Kissimmee River from Lake Kissimmee to Lake Okeechobee as part of the Central and Southern Florida Flood Control Project. Six water control structures and locks were constructed along the canal. The project provided flood control and water control benefits for the upper and lower basins. The Kissimmee River project is addressing restoration of natural flooding of the floodplain to reestablish historic wetland conditions. Construction will include backfilling approximately 22 miles of the C-38 canal, excavation of approximately 9 miles of new river channel to provide hydrologic connection, and the removal of 2 water control structures and locks in the backfilled sections. The project will also include acquisition of fee title for lands within the 5-year-floodplain and acquisition of flowage easements for lands between the five-year-flood line and the 100-year-flood line.

AUTHORIZATION: Water Resources Development Acts of 1988 (Section 46) and 1992 (Section 101).

REMAINING BENEFIT - REMAINING COST RATIO: Not applicable

TOTAL BENEFIT - COST RATIO: Not applicable

INITIAL BENEFIT - COST RATIO: Not applicable

SUMMARIZED FINANCIAL DATA				ACCUM. PCT. OF EST. FED COST
Estimated Federal Cost			255,600,000	
Programmed Construction		255,600,000		
Unprogrammed Construction		0		
Estimated Non-Federal Cost			414,400,000	
Programmed Construction		251,365,000		
Cash Contributions	56,676,000			
Other Costs	194,689,000			
Estimated Non-Federal Cost Unprogrammed Construction		163,035,000		
Cash Contributions	0			
Locally Preferred Plan	163,035,000			
Total Estimated Programmed Construction Cost			506,965,000	
Total Estimated Unprogrammed Construction Cost			163,035,000	
Total Estimated Project Cost			670,000,000	
Allocations to 30 September 1994			27,371,000	
Conference Allowance for FY 1995			4,000,000	
Allocation for FY 1995			4,000,000	
Allocations through FY 1995			31,371,000 1/	12
Allocation Requested for FY 1996			0	
Programmed Balance to Complete After FY 1996			224,229,000	
Unprogrammed Balance to Complete After FY 1996			0	

STATUS (1 Jan 1995)	PERCENT COMPLETE	PHYSICAL COMPLETION SCHEDULE
Lands and Damages	42	Being determined
Relocations - Bridges	0	Being determined
Channels and Canals	0	Being determined
Flood Control Structures	0	Being determined
Entire Project	10	Being determined

1/ Reflects $17,568,000 in programmed carryover into FY 96.

PHYSICAL DATA

Relocations - (Bridges)	2
Canals - Miles Backfilled	22
Canals - New River Channel	9
Water Control Structures Removal	2

JUSTIFICATION: Local water resource development of the Kissimmee River began in the late 1800's. In the 1960's, the river was channelized as part of the comprehensive Central and Southern Florida Project. Although the project has provided continuing navigation and effective flood control, it also resulted in long-term degradation of the natural ecosystem. The 103 mile river that historically meandered across and inundated about 35,000 acres of wetlands over a broad flood plain was reduced to a 56 mile canal that has successfully contained almost all flows since its completion. The channelization coupled with the modifications of the Lower Basin tributary watersheds and efficient control of flood waters and regulation of inflows from the Upper Basin significantly altered hydrologic characteristics of the ecosystem. Project formulation and scoping was not based on traditional economic benefit-cost analyses and net benefit optimization; rather the plan was based on the most cost effective plan which would meet fish and wildlife resources objectives for restoring ecological integrity. As a result, project construction will result in the restoration of 52 miles of river; 27,000 acres of wetlands; improved water quality characteristics for the Kissimmee River; and restored conditions for over 300 fish and wildlife species.

FISCAL YEAR 1996: The total program amount includes the programmed carryover amount of $2,125,000 and an unobligated carryover of $15,443,000 into FY 1997, will be applied as follows:

Planning, Engineering, and Design	2,125,000
Total	$2,125,000

NON-FEDERAL COST: In accordance with the cost sharing and financing concepts reflected in the authorizing legislation, the non-Federal sponsor must comply with the requirements listed below.

Requirements of Local Cooperation	Payments During Construction, and Reimbursements	Annual Operation, Maintenance, Repair, Rehabilitation, and Replacement Costs
Provide; with credit toward the non-Federal 50 percent share of project costs; all lands, easements, rights of way, and excavated or dredged material disposal areas.	181,600,000	
Modify or relocate; with credit toward the non-Federal 50 percent share of project costs; utilities, roads, bridges (except railroad bridges), and other facilities, where necessary for the construction of the project.	13,089,000	
Pay 50 percent of the costs allocated to environmental restoration, and pay all costs of operation, maintenance, repair, rehabilitation, and replacement.	56,676,000	
Pay 100 percent of the locally-preferred features, and pay all costs of operation, maintenance, and replacement of flood control facilities.	163,035,000	
Total Non-Federal Costs	$414,400,000	

STATUS OF LOCAL COOPERATION: A Project Cooperation Agreement reflecting the cost sharing outlined in House Document 102-286 dated April 7, 1992 was executed with the South Florida Water Management District (SFWMD) in March 1994. The local sponsor will be required to provide a cash contribution of 18.6% (reflecting credit for lands, easements, rights of way, relocations, and disposal areas) of construction costs. A schedule has been developed for cash contributions which takes into account the value of the local sponsor's investment in lands and relocations, thus requiring the initial local sponsor cash contribution in Fiscal Year 2004 for expenditure in Fiscal Year 2005.

COMPARISON OF FEDERAL COST ESTIMATES: The current Federal (Corps) cost estimate of $255,600,000 has been presented to Congress (FY 1995).

STATUS OF ENVIRONMENTAL IMPACT STATEMENT: The final Environmental Impact Statement was filed with CEQ on April 5, 1992. A supplement to the Environmental Impact Statement will be integrated into the Upper Basin project modification report. The draft report is scheduled to be submitted to higher authority in August 1995.

OTHER INFORMATION: Funds to initiate construction were appropriated in Fiscal Year 1992.

SOUTH ATLANTIC DIVISION
JUSTIFICATION OF ESTIMATE

APPROPRIATION TITLE: Operation and Maintenance, General, FY 1996

1. Navigation

a. Channels and Harbors

The program request of $123,112,000 provides for essential work on 63 harbor and channel projects named in the list which follows. The work to be accomplished under this activity consists of maintaining the navigation channels and harbors and anchorages of coastal harbors and waterways by means of dredging, snagging, bank revetment, and operation and repair of navigation structures, all as authorized in the laws adopting river and harbor projects.

STATE	ESTIMATED OBLIGATIONS		
	FY 1995 ($)	FY 1996 ($)	Reason for Change and Major Maintenance Items
Project Name	Total (Operations) (Maintenance)	Total (Operations) (Maintenance)	1. Reason for Change in Operations from FY 95 to FY 96 (10%+/-). 2. Major Maintenance Items Budgeted in FY 96 (Threshold $500,000).
ALABAMA			
Bayou Coden	24,000	231,000	
	(24,000)	(5,000)	1. Decrease in environmental requirements.
	(0)	(226,000)	2. None.
Bayou La Batre	531,000	455,000	
	(131,000)	(5,000)	1. Decrease in environmental requirements.
	(400,000)	(450,000)	2. None.
Bon Secour River	0	551,000	
	(0)	(0)	1. None.
	(0)	(551,000)	2. Dredging.

SOUTH ATLANTIC DIVISION
JUSTIFICATION OF ESTIMATE

APPROPRIATION TITLE: Operation and Maintenance, General, FY 1996

1. Navigation (Cont.)

a. Channels and Harbors (Cont.)

STATE Project Name	ESTIMATED OBLIGATIONS FY 1995 ($) Total (Operations) (Maintenance)	 FY 1996 ($) Total (Operations) (Maintenance)	Reason for Change and Major Maintenance Items 1. Reason for Change in Operations from FY 95 to FY 96 (10%+/-). 2. Major Maintenance Items Budgeted in FY 96 (Threshold $500,000).
Dauphin Island Bay	10,000	252,000	
	(10,000)	(3,000)	1. Decrease in environmental requirements.
	(0)	(249,000)	2. None.
Dog and Fowl Rivers	39,000	505,000	
	(39,000)	(5,000)	1. Decrease in environmental requirements.
	(0)	(500,000)	2. Dredging.
Fly Creek	0	249,000	
	(0)	(0)	1. None.
	(0)	(249,000)	2. None.
Gulf Intracoastal	2,674,000	3,172,000	
Waterway (Mobile)	(304,000)	(318,000)	1. None.
	(2,370,000)	(2,854,000)	2. Dredging.
Mobile Harbor	18,476,000	17,780,000	
	(214,000)	(214,000)	1. None.
	(18,262,000)	(17,566,000)	2. Dredging.
Perdido Pass Channel	772,000	350,000	
	(0)	(0)	1. None.
	(772,000)	(350,000)	2. None.

SOUTH ATLANTIC DIVISION
JUSTIFICATION OF ESTIMATE

APPROPRIATION TITLE: Operation and Maintenance, General, FY 1996

1. Navigation (Cont.)

a. Channels and Harbors (Cont.)

STATE Project Name	ESTIMATED OBLIGATIONS FY 1995 ($) Total (Operations) (Maintenance)	 FY 1996 ($) Total (Operations) (Maintenance)	Reason for Change and Major Maintenance Items 1. Reason for Change in Operations from FY 95 to FY 96 (10%+/-). 2. Major Maintenance Items Budgeted in FY 96 (Threshold $500,000).
FLORIDA			
AIWW (Jacksonville)	251,000	75,000	
	(40,000)	(0)	1. Decrease in condition and operations studies.
	(211,000)	(75,000)	2. None.
Apalachicola Bay	554,000	187,000	
	(121,000)	(59,000)	1. Decrease in environmental requirements.
	(433,000)	(128,000)	2. None.
Canaveral Harbor	1,939,000	4,736,000	
	(514,000)	(574,000)	1. Increase in lock operating costs.
	(1,425,000)	(4,162,000)	2. Dredging.
Charlotte Harbor	275,000	3,275,000	
	(0)	(75,000)	1. Increase in condition and operations studies.
	(275,000)	(3,200,000)	2. Dredging.
East Pass Channel	1,861,000	886,000	
	(28,000)	(24,000)	1. Decrease in condition and operations studies.
	(1,833,000)	(862,000)	2. Dredging.

SOUTH ATLANTIC DIVISION
JUSTIFICATION OF ESTIMATE

APPROPRIATION TITLE: Operation and Maintenance, General, FY 1996

1. Navigation (Cont.)

a. Channels and Harbors (Cont.)

STATE Project Name	ESTIMATED OBLIGATIONS FY 1995 ($) Total (Operations) (Maintenance)	ESTIMATED OBLIGATIONS FY 1996 ($) Total (Operations) (Maintenance)	Reason for Change and Major Maintenance Items 1. Reason for Change in Operations from FY 95 to FY 96 (10%+/-). 2. Major Maintenance Items Budgeted in FY 96 (Threshold $500,000).
Fernandina Harbor	2,098,000	1,623,000	
	(110,000)	(107,000)	1. None.
	(1,988,000)	(1,516,000)	2. Dredging.
Fort Pierce Harbor	467,000	712,000	
	(40,000)	(62,000)	1. Increase in condition and operations studies.
	(427,000)	(650,000)	2. Dredging.
IWW, Caloosahatchee-Anclote Rivers	128,000	221,000	
	(10,000)	(110,000)	1. Increase in condition and operations studies.
	(118,000)	(111,000)	2. None.
IWW, Jacksonville to Miami	1,051,000	3,293,000	
	(306,000)	(335,000)	1. Increase in condition and operations studies.
	(745,000)	(2,958,000)	2. Dredging.
Jacksonville Harbor	5,248,000	4,119,000	
	(295,000)	(127,000)	1. Decrease in condition and operations studies.
	(4,953,000)	(3,992,000)	2. Dredging.
Johns Pass	75,000	400,000	
	(0)	(40,000)	1. Increase in condition and operations studies.
	(75,000)	(360,000)	2. None.

SOUTH ATLANTIC DIVISION
JUSTIFICATION OF ESTIMATE

APPROPRIATION TITLE: Operation and Maintenance, General, FY 1996

1. Navigation (Cont.)

a. Channels and Harbors (Cont.)

STATE Project Name	ESTIMATED OBLIGATIONS FY 1995 ($) Total (Operations) (Maintenance)	 FY 1996 ($) Total (Operations) (Maintenance)	Reason for Change and Major Maintenance Items 1. Reason for Change in Operations from FY 95 to FY 96 (10%+/-). 2. Major Maintenance Items Budgeted in FY 96 (Threshold $500,000).
Miami Harbor	212,000	295,000	
	(89,000)	(85,000)	1. None.
	(123,000)	(210,000)	2. None.
New Pass	125,000	1,086,000	
	(0)	(60,000)	1. Increase in condition and operations studies.
	(125,000)	(1,026,000)	2. Dredging
Palm Beach Harbor	747,000	1,459,000	
	(42,000)	(42,000)	1. None.
	(705,000)	(1,417,000)	2. Dredging.
Panama City Harbor	380,000	717,000	
	(36,000)	(107,000)	1. Increase in condition and operations studies.
	(344,000)	(610,000)	2. Dredging.
Ponce de Leon Inlet	50,000	2,147,000	
	(30,000)	(42,000)	1. Increase in environmental requirements.
	(20,000)	(2,105,000)	2. Dredging and jetty repairs.
Port St. Joe Harbor	0	72,000	
	(0)	(72,000)	1. Increase in condition and operations studies.
	(0)	(0)	2. None.

SOUTH ATLANTIC DIVISION
JUSTIFICATION OF ESTIMATE

APPROPRIATION TITLE: Operation and Maintenance, General, FY 1996

1. Navigation (Cont.)

a. Channels and Harbors (Cont.)

STATE Project Name	ESTIMATED OBLIGATIONS FY 1995 ($) Total (Operations) (Maintenance)	 FY 1996 ($) Total (Operations) (Maintenance)	Reason for Change and Major Maintenance Items 1. Reason for Change in Operations from FY 95 to FY 96 (10%+/-). 2. Major Maintenance Items Budgeted in FY 96 (Threshold $500,000).
St. Augustine Harbor	280,000	4,000	
	(2,000)	(2,000)	1. None.
	(278,000)	(2,000)	2. None.
St. Lucie Inlet	1,241,000	85,000	
	(221,000)	(80,000)	1. Decrease in condition and operations studies.
	(1,020,000)	(5,000)	2. None.
Tampa Harbor	2,024,000	3,744,000	
	(256,000)	(257,000)	1. None.
	(1,768,000)	(3,487,000)	2. Dredging.
Withlacoochee River	54,000	34,000	
	(20,000)	(0)	1. Decrease in condition and operations studies.
	(34,000)	(34,000)	2. None.
GEORGIA			
AIWW (Savannah)	2,174,000	1,916,000	
	(306,000)	(336,000)	1. None.
	(1,868,000)	(1,580,000)	2. Dredging.

SOUTH ATLANTIC DIVISION
JUSTIFICATION OF ESTIMATE

APPROPRIATION TITLE: Operation and Maintenance, General, FY 1996

1. Navigation (Cont.)

a. Channels and Harbors (Cont.)

STATE Project Name	ESTIMATED OBLIGATIONS FY 1995 ($) Total (Operations) (Maintenance)	 FY 1996 ($) Total (Operations) (Maintenance)	Reason for Change and Major Maintenance Items 1. Reason for Change in Operations from FY 95 to FY 96 (10%+/-). 2. Major Maintenance Items Budgeted in FY 96 (Threshold $500,000).
Brunswick Harbor	3,450,000	3,411,000	
	(966,000)	(913,000)	1. None.
	(2,484,000)	(2,498,000)	2. Dredging.
Savannah Harbor	8,499,000	8,377,000	
	(671,000)	(751,000)	1. None.
	(7,828,000)	(7,626,000)	2. Dredging.
Savannah River	880,000	2,475,000	
Below Augusta	(56,000)	(162,000)	1. Increase in condition and operations studies.
	(824,000)	(2,313,000)	2. Grout and reinforce dam piers and repair gates.
MISSISSIPPI			
Biloxi Harbor	673,000	461,000	
	(141,000)	(56,000)	1. Decrease in environmental requirements.
	(532,000)	(405,000)	2. None.
Gulfport Harbor	2,275,000	2,876,000	
	(214,000)	(133,000)	1. Decrease in environmental requirements.
	(2,061,000)	(2,743,000)	2. Dredging.

SOUTH ATLANTIC DIVISION
JUSTIFICATION OF ESTIMATE

APPROPRIATION TITLE: Operation and Maintenance, General, FY 1996

1. Navigation (Cont.)

a. Channels and Harbors (Cont.)

STATE Project Name	ESTIMATED OBLIGATIONS FY 1995 ($) Total (Operations) (Maintenance)	 FY 1996 ($) Total (Operations) (Maintenance)	Reason for Change and Major Maintenance Items 1. Reason for Change in Operations from FY 95 to FY 96 (10%+/-). 2. Major Maintenance Items Budgeted in FY 96 (Threshold $500,000).
Pascagoula Harbor	2,893,000	2,998,000	
	(139,000)	(139,000)	1. None.
	(2,754,000)	(2,859,000)	2. Dredging.
NORTH CAROLINA			
AIWW (Wilmington)	4,926,000	5,097,000	
	(1,218,000)	(1,240,000)	1. None.
	(3,708,000)	(3,857,000)	2. Dredging.
Beaufort Harbor	0	350,000	
	(0)	(0)	1. None.
	(0)	(350,000)	2. None.
Belhaven Harbor	0	415,000	
	(0)	(0)	1. None.
	(0)	(415,000)	2. None.
Bogue Inlet and Channels	507,000	655,000	
	(0)	(0)	1. None.
	(507,000)	(655,000)	2. Dredging.

SOUTH ATLANTIC DIVISION
JUSTIFICATION OF ESTIMATE

APPROPRIATION TITLE: Operation and Maintenance, General, FY 1996

1. Navigation (Cont.)

a. Channels and Harbors (Cont.)

STATE Project Name	ESTIMATED OBLIGATIONS FY 1995 ($) Total (Operations) (Maintenance)	 FY 1996 ($) Total (Operations) (Maintenance)	Reason for Change and Major Maintenance Items 1. Reason for Change in Operations from FY 95 to FY 96 (10%+/-). 2. Major Maintenance Items Budgeted in FY 96 (Threshold $500,000).
Carolina Beach Inlet	918,000	852,000	
	(0)	(0)	1. None.
	(918,000)	(852,000)	2. Dredging.
Lockwoods Folly River	421,000	857,000	
	(0)	(0)	1. None.
	(421,000)	(857,000)	2. Dredging.
Manteo (Shallowbag) Bay	4,020,000	6,506,000	
	(150,000)	(135,000)	1. Decrease in condition and operations studies.
	(3,870,000)	(6,371,000)	2. Dredging.
Masonboro Inlet and Connecting Channels	75,000	4,650,000	
	(40,000)	(0)	1. Decrease in condition and operations studies.
	(35,000)	(4,650,000)	2. North jetty repairs.
Morehead City Harbor	1,965,000	3,108,000	
	(221,000)	(308,000)	1. Increase in condition and operations studies.
	(1,744,000)	(2,800,000)	2. Dredging.

SOUTH ATLANTIC DIVISION
JUSTIFICATION OF ESTIMATE

APPROPRIATION TITLE: Operation and Maintenance, General, FY 1996

1. Navigation (Cont.)

a. Channels and Harbors (Cont.)

STATE	ESTIMATED OBLIGATIONS		
Project Name	FY 1995 ($) Total (Operations) (Maintenance)	FY 1996 ($) Total (Operations) (Maintenance)	Reason for Change and Major Maintenance Items 1. Reason for Change in Operations from FY 95 to FY 96 (10%+/-). 2. Major Maintenance Items Budgeted in FY 96 (Threshold $500,000).
New River Inlet	503,000	1,595,000	
	(0)	(0)	1. None.
	(503,000)	(1,595,000)	2. Dredging.
New Topsail Inlet and Connecting Channels	952,000	840,000	
	(0)	(0)	1. None.
	(952,000)	(840,000)	2. Dredging.
Pamlico and Tar Rivers	112,000	125,000	
	(0)	(0)	1. None.
	(112,000)	(125,000)	2. None.
Roanoke River	125,000	125,000	
	(0)	(0)	1. None.
	(125,000)	(125,000)	2. None.
Silver Lake Harbor	645,000	200,000	
	(0)	(0)	1. None.
	(645,000)	(200,000)	2. None.
Wilmington Harbor	5,832,000	6,048,000	
	(383,000)	(381,000)	1. None.
	(5,449,000)	(5,667,000)	2. Dredging.

SOUTH ATLANTIC DIVISION
JUSTIFICATION OF ESTIMATE

APPROPRIATION TITLE: Operation and Maintenance, General, FY 1996

1. Navigation (Cont.)

a. Channels and Harbors (Cont.)

STATE	ESTIMATED OBLIGATIONS		
	FY 1995 ($)	FY 1996 ($)	Reason for Change and Major Maintenance Items
Project Name	Total	Total	
	(Operations)	(Operations)	1. Reason for Change in Operations from FY 95 to FY 96 (10%+/-).
	(Maintenance)	(Maintenance)	2. Major Maintenance Items Budgeted in FY 96 (Threshold $500,000).
PUERTO RICO			
San Juan Harbor	1,375,000	10,000	
	(10,000)	(10,000)	1. None.
	(1,365,000)	(0)	2. None.
SOUTH CAROLINA			
AIWW (Charleston)	3,000,000	2,420,000	
	(129,000)	(103,000)	1. Increase in boundary surveys and monumentation.
	(2,871,000)	(2,317,000)	2. Dredging.
Charleston Harbor	4,923,000	5,426,000	
	(314,000)	(201,000)	1. Decrease in environmental requirements.
	(4,609,000)	(5,225,000)	2. Dredging.
Cooper River,	2,887,000	2,469,000	
Charleston Harbor	(2,357,000)	(1,849,000)	1. Decrease in payments to Power Authority.
	(530,000)	(620,000)	2. None.
Folly River	736,000	386,000	
	(18,000)	(18,000)	1. None.
	(718,000)	(368,000)	2. None.

SOUTH ATLANTIC DIVISION
JUSTIFICATION OF ESTIMATE

APPROPRIATION TITLE: Operation and Maintenance, General, FY 1996

1. Navigation (Cont.)

a. Channels and Harbors (Cont.)

STATE	ESTIMATED OBLIGATIONS		
	FY 1995 ($)	FY 1996 ($)	Reason for Change and Major Maintenance Items
Project Name	Total (Operations) (Maintenance)	Total (Operations) (Maintenance)	1. Reason for Change in Operations from FY 95 to FY 96 (10%+/-). 2. Major Maintenance Items Budgeted in FY 96 (Threshold $500,000).
Georgetown Harbor	2,909,000	3,509,000	
	(106,000)	(192,000)	1. Increase in environmental requirements.
	(2,803,000)	(3,317,000)	2. Dredging.
Little River Inlet	89,000	64,000	
	(89,000)	(64,000)	1. Decrease in condition and operations studies.
	(0)	(0)	2. None.
Murrells Inlet	95,000	65,000	
	(95,000)	(65,000)	1. Decrease in condition and operations studies.
	(0)	(0)	2. None.
Port Royal Harbor	579,000	1,192,000	
	(39,000)	(39,000)	1. None.
	(540,000)	(1,153,000)	2. Dredging.
Shipyard River	380,000	428,000	
	(17,000)	(14,000)	1. Decrease in condition and operations studies.
	(363,000)	(414,000)	2. None.
Town Creek	791,000	491,000	
	(33,000)	(33,000)	1. None.
	(758,000)	(458,000)	2. None.

SOUTH ATLANTIC DIVISION
JUSTIFICATION OF ESTIMATE

APPROPRIATION TITLE: Operation and Maintenance, General, FY 1996

1. Navigation (Cont.)

a. Channels and Harbors (Cont.)

STATE Project Name	ESTIMATED OBLIGATIONS FY 1995 ($) Total (Operations) (Maintenance)	 FY 1996 ($) Total (Operations) (Maintenance)	Reason for Change and Major Maintenance Items 1. Reason for Change in Operations from FY 95 to FY 96 (10%+/-). 2. Major Maintenance Items Budgeted in FY 96 (Threshold $500,000).
Projects Maintained Periodically	1,247,000 (449,000) (798,000)	0 (0) (0)	
TOTAL - Channels and Harbors	102,442,000 (11,043,000) (91,399,000)	123,112,000 (9,952,000) (113,160,000)	

SOUTH ATLANTIC DIVISION
JUSTIFICATION OF ESTIMATE

APPROPRIATION TITLE: Operation and Maintenance, General, FY 1996

1. Navigation (Cont.)

b. Locks, Dams, and Canals

The program request of $53,159,000 provides for the operational requirements of seven canalized waterways. Requirements include: operation and ordinary maintenance of project facilities; labor, supplies, materials, and parts for day-to-day functioning; and periodic maintenance, repairs, and replacements.

STATE Project Name	ESTIMATED OBLIGATIONS FY 1995 ($) Total (Operations) (Maintenance)	 FY 1996 ($) Total (Operations) (Maintenance)	Reason for Change and Major Maintenance Items 1. Reason for Change in Operations from FY 95 to FY 96 (10%+/-). 2. Major Maintenance Items Budgeted in FY 96 (Threshold $500,000).
ALABAMA			
Alabama-Coosa Rivers	5,308,000 (1,652,000) (3,656,000)	5,668,000 (1,680,000) (3,988,000)	 1. None. 2. Dredging.
Black Warrior and Tombigbee Rivers	20,846,000 (5,730,000) (15,116,000)	16,820,000 (5,214,000) (11,606,000)	 1. None. 2. Dredging.
ALABAMA AND GEORGIA			
Apalachicola, Chattahoochee and Flint Rivers	4,241,000 (1,235,000) (3,006,000)	4,321,000 (1,279,000) (3,042,000)	 1. None 2. Dredging.

SOUTH ATLANTIC DIVISION
JUSTIFICATION OF ESTIMATE

APPROPRIATION TITLE: Operation and Maintenance, General, FY 1996

1. Navigation (Cont.)

b. Locks, Dams, and Canals (Cont.)

STATE Project Name	ESTIMATED OBLIGATIONS FY 1995 ($) Total (Operations) (Maintenance)	ESTIMATED OBLIGATIONS FY 1996 ($) Total (Operations) (Maintenance)	Reason for Change and Major Maintenance Items 1. Reason for Change in Operations from FY 95 to FY 96 (10%+/-). 2. Major Maintenance Items Budgeted in FY 96 (Threshold $500,000).
ALABAMA AND MISSISSIPPI			
Tennessee-Tombigbee Waterway	19,301,000 (11,073,000) (8,228,000)	21,090,000 (11,174,000) (9,916,000)	1. None. 2. Dredging.
FLORIDA			
Apalachicola, Chattahoochee and Flint Rivers (see Alabama and Georgia)			
Okeechobee Waterway	3,178,000 (1,964,000) (1,214,000)	3,933,000 (2,123,000) (1,810,000)	1. None. 2. Dredging and lock maintenance.
Oklawaha River	124,000 (17,000) (107,000)	127,000 (15,000) (112,000)	1. None. 2. None.

SOUTH ATLANTIC DIVISION
JUSTIFICATION OF ESTIMATE

APPROPRIATION TITLE: Operation and Maintenance, General, FY 1996

1. Navigation (Cont.)

b. Locks, Dams, and Canals (Cont.)

STATE Project Name	ESTIMATED OBLIGATIONS FY 1995 ($) Total (Operations) (Maintenance)	 FY 1996 ($) Total (Operations) (Maintenance)	Reason for Change and Major Maintenance Items 1. Reason for Change in Operations from FY 95 to FY 96 (10%+/-). 2. Major Maintenance Items Budgeted in FY 96 (Threshold $500,000).
NORTH CAROLINA			
Cape Fear River	743,000	1,200,000	
above Wilmington	(469,000)	(462,000)	1. None.
	(274,000)	(738,000)	2. None.
TOTAL - Locks,	53,741,000	53,159,000	
Dams, and Canals	(22,140,000)	(21,947,000)	
	(31,601,000)	(31,212,000)	
TOTAL - NAVIGATION	156,183,000	176,271,000	
	(33,183,000)	(31,899,000)	
	(123,000,000)	(144,372,000)	

SOUTH ATLANTIC DIVISION
JUSTIFICATION OF ESTIMATE

APPROPRIATION TITLE: Operation and Maintenance, General, FY 1996

2. Flood Control

a. Reservoirs

The program request of $7,008,000 provides for operation and maintenance of four reservoirs.

STATE Project Name	ESTIMATED OBLIGATIONS FY 1995 ($) Total (Operations) (Maintenance)	FY 1996 ($) Total (Operations) (Maintenance)	Reason for Change and Major Maintenance Items 1. Reason for Change in Operations from FY 95 to FY 96 (10%+/-). 2. Major Maintenance Items Budgeted in FY 96 (Threshold $500,000).
ALABAMA			
Alabama-Coosa River	3,286,000	0	
Comprehensive Water	(3,286,000)	(0)	1. Completion funds in FY 1995.
Study, AL	(0)	(0)	2. None.
Scheduled Reservoir	59,000	80,000	
Operation, Coosa	(59,000)	(80,000)	1. Increase in condition and operations studies.
River, AL	(0)	(0)	2. None.
MISSISSIPPI			
Okatibbee Lake	1,480,000	1,773,000	
	(1,094,000)	(1,288,000)	1. Increase in Tennessee Tombigbee Waterway mitigation program.
	(386,000)	(485,000)	2. None.

SOUTH ATLANTIC DIVISION
JUSTIFICATION OF ESTIMATE

APPROPRIATION TITLE: Operation and Maintenance, General, FY 1996

2. Flood Control (Cont.)

a. Reservoirs (Cont.)

STATE Project Name	ESTIMATED OBLIGATIONS FY 1995 ($) Total (Operations) (Maintenance)	ESTIMATED OBLIGATIONS FY 1996 ($) Total (Operations) (Maintenance)	Reason for Change and Major Maintenance Items 1. Reason for Change in Operations from FY 95 to FY 96 (10%+/-). 2. Major Maintenance Items Budgeted in FY 96 (Threshold $500,000).
NORTH CAROLINA			
B. Everett Jordan	1,234,000	1,237,000	
Dam and Lake	(958,000)	(974,000)	1. None.
	(276,000)	(263,000)	2. None.
Falls Lake	1,015,000	1,070,000	
	(804,000)	(824,000)	1. None.
	(211,000)	(246,000)	2. None.
W. Kerr Scott Dam	1,800,000	2,848,000	
and Reservoir	(1,141,000)	(1,053,000)	1. None.
	(659,000)	(1,795,000)	2. Construction of new management center.
TOTAL - Reservoirs	8,874,000	7,008,000	
	(7,342,000)	(4,219,000)	
	(1,532,000)	(2,789,000)	

SOUTH ATLANTIC DIVISION
JUSTIFICATION OF ESTIMATE

APPROPRIATION TITLE: Operation and Maintenance, General, FY 1996

2. Flood Control (Cont.)

b. Channel Improvements, Inspections, and Miscellaneous Maintenance

The program request of $10,206,000 provides for the maintenance requirements of two local flood protection projects and inspection of 115 completed projects during the year.

STATE Project Name	ESTIMATED OBLIGATIONS FY 1995 ($) Total (Operations) (Maintenance)	 FY 1996 ($) Total (Operations) (Maintenance)	Reason for Change and Major Maintenance Items 1. Reason for Change in Operations from FY 95 to FY 96 (10%+/-). 2. Major Maintenance Items Budgeted in FY 96 (Threshold $500,000).
FLORIDA			
Central and Southern Florida	10,283,000 (3,879,000) (6,404,000)	9,846,000 (4,969,000) (4,877,000)	1. Completion funds for major rehab report on dikes in FY 96. 2. Spillway and culvert repairs.
MISSISSIPPI			
East Fork, Tombigbee River	164,000 (0) (164,000)	203,000 (0) (203,000)	1. None. 2. None.
Inspection of Completed Works	120,000 (120,000) (0)	157,000 (157,000) (0)	1. Increase in number of sites inspected. 2. None.

SOUTH ATLANTIC DIVISION
JUSTIFICATION OF ESTIMATE

APPROPRIATION TITLE: Operation and Maintenance, General, FY 1996

2. Flood Control (Cont.)

b. Channel Improvements, Inspections, and Miscellaneous Maintenance (Cont.)

STATE Project Name	ESTIMATED OBLIGATIONS FY 1995 ($) Total (Operations) (Maintenance)	 FY 1996 ($) Total (Operations) (Maintenance)	Reason for Change and Major Maintenance Items 1. Reason for Change in Operations from FY 95 to FY 96 (10%+/-). 2. Major Maintenance Items Budgeted in FY 96 (Threshold $500,000).
TOTAL - Channel Improvements, Inspections, & Miscellaneous Maintenance	10,567,000 (3,999,000) (6,568,000)	10,206,000 (5,126,000) (5,080,000)	
TOTAL - FLOOD CONTROL	19,441,000 (11,341,000) (8,100,000)	17,214,000 (9,345,000) (7,869,000)	

3. Multiple Purpose Power

The program request of $82,179,000 provides for the operation requirements of 13 multiple purpose projects. Requirements include: operation and ordinary maintenance of project facilities; labor, supplies, materials, and parts for day-to-day functioning; and periodic maintenance, repairs and replacements. The requested amount also includes application of special recreation use fees for recreation areas.

ALABAMA

Millers Ferry Lock and Dam - William "Bill" Dannelly Reservoir	5,019,000 (1,718,000) (3,301,000)	5,156,000 (1,825,000) (3,331,000)	1. None. 2. Replace Units 2 and 3 stator windings.

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SOUTH ATLANTIC DIVISION
JUSTIFICATION OF ESTIMATE

APPROPRIATION TITLE: Operation and Maintenance, General, FY 1996

3. Multiple Purpose Power (Cont.)

STATE Project Name	ESTIMATED OBLIGATIONS FY 1995 ($) Total (Operations) (Maintenance)	 FY 1996 ($) Total (Operations) (Maintenance)	Reason for Change and Major Maintenance Items 1. Reason for Change in Operations from FY 95 to FY 96 (10%+/-). 2. Major Maintenance Items Budgeted in FY 96 (Threshold $500,000).
Robert F. Henry	5,731,000	3,688,000	
Lock and Dam - R.E.	(1,437,000)	(1,450,000)	1. None.
"Bob" Woodruff Lake	(4,294,000)	(2,238,000)	2. Replace Unit 4 stator windings.
Walter F. George	6,193,000	6,434,000	
Lock and Dam	(2,994,000)	(3,192,000)	1. None.
	(3,199,000)	(3,242,000)	2. None.
FLORIDA			
Jim Woodruff Lock	6,356,000	5,111,000	
and Dam	(2,392,000)	(2,554,000)	1. None.
	(3,964,000)	(2,557,000)	2. None.
GEORGIA			
Allatoona Lake	5,978,000	5,894,000	
	(2,683,000)	(2,807,000)	1. None.
	(3,295,000)	(3,087,000)	2. None.
Buford Dam - Lake	6,335,000	7,377,000	
Sidney Lanier	(2,793,000)	(2,996,000)	1. None.
	(3,542,000)	(4,381,000)	2. None.

SOUTH ATLANTIC DIVISION
JUSTIFICATION OF ESTIMATE

APPROPRIATION TITLE: Operation and Maintenance, General, FY 1996

3. Multiple Purpose Power (Cont.)

STATE Project Name	ESTIMATED OBLIGATIONS FY 1995 ($) Total (Operations) (Maintenance)	 FY 1996 ($) Total (Operations) (Maintenance)	Reason for Change and Major Maintenance Items 1. Reason for Change in Operations from FY 95 to FY 96 (10%+/-). 2. Major Maintenance Items Budgeted in FY 96 (Threshold $500,000).
Carters Lake	3,146,000	5,218,000	
	(1,890,000)	(2,023,000)	1. None
	(1,256,000)	(3,195,000)	2. Replacement of microwave system.
Hartwell Lake	7,929,000	10,364,000	
	(4,961,000)	(5,410,000)	1. None.
	(2,968,000)	(4,954,000)	2. None.
J. Strom Thurmond Lake	7,125,000	9,480,000	
	(4,507,000)	(4,922,000)	1. None.
	(2,618,000)	(4,558,000)	2. Replace line relays and power transformers.
Richard B. Russell Dam and Lake	5,634,000	7,307,000	
	(3,577,000)	(3,835,000)	1. None.
	(2,057,000)	(3,472,000)	2. None.
Walter F. George L & D (see Alabama)			
West Point Lake	8,447,000	5,114,000	
	(2,035,000)	(2,235,000)	1. None.
	(6,412,000)	(2,879,000)	2. None.
NORTH CAROLINA			
John H. Kerr Dam and Reservoir (see Virginia)			

SOUTH ATLANTIC DIVISION
JUSTIFICATION OF ESTIMATE

APPROPRIATION TITLE: Operation and Maintenance, General, FY 1996

3. Multiple Purpose Power (Cont.)

STATE	ESTIMATED OBLIGATIONS		
	FY 1995 ($)	FY 1996 ($)	Reason for Change and Major Maintenance Items
Project Name	Total	Total	
	(Operations)	(Operations)	1. Reason for Change in Operations from FY 95 to FY 96 (10%+/-).
	(Maintenance)	(Maintenance)	2. Major Maintenance Items Budgeted in FY 96 (Threshold $500,000).
SOUTH CAROLINA			
Hartwell Lake (see Georgia)			
J. Strom Thurmond Lake (see Georgia)			
Richard B. Russell (see Georgia)			
VIRGINIA			
John H. Kerr Dam	7,105,000	8,770,000	
and Reservoir	(4,713,000)	(4,796,000)	1. None.
	(2,392,000)	(3,974,000)	2. Earth dike modifications.
Philpott Lake	2,128,000	2,266,000	
	(1,404,000)	(1,417,000)	1. None.
	(724,000)	(849,000)	2. None.
TOTAL - Multiple	77,126,000	82,179,000	
Purpose Projects	(37,104,000)	(39,462,000)	
	(40,022,000)	(42,717,000)	

SOUTH ATLANTIC DIVISION
JUSTIFICATION OF ESTIMATE

APPROPRIATION TITLE: Operation and Maintenance, General, FY 1996

4. Protection of Navigation

The program request of $4,642,000 provides for accomplishing the work essential to the eradication of aquatic plant growth for navigable waters in Florida and project condition surveys for navigation projects for which maintenance is not scheduled in the budget year.

STATE Project Name	ESTIMATED OBLIGATIONS FY 1995 ($) Total (Operations) (Maintenance)	ESTIMATED OBLIGATIONS FY 1996 ($) Total (Operations) (Maintenance)	Reason for Change and Major Maintenance Items 1. Reason for Change in Operations from FY 95 to FY 96 (10%+/-). 2. Major Maintenance Items Budgeted in FY 96 (Threshold $500,000).
Removal of Aquatic Growth	3,764,000 (25,000) (3,739,000)	3,700,000 (25,000) (3,675,000)	1. None. 2. None.
Project Condition Surveys	748,000 (748,000) (0)	942,000 (942,000) (0)	1. Increase in number of projects surveyed. 2. None.
TOTAL - Protection of Navigation	4,512,000 (773,000) (3,739,000)	4,642,000 (967,000) (3,675,000)	
GRAND TOTAL - SOUTH ATLANTIC DIVISION	257,262,000 (82,401,000) (174,861,000)	280,306,000 (81,673,000) (198,633,000)	

NEW POLICY

Mr. MYERS. Mr. Bevill.

Mr. BEVILL. Thank you, Mr. Chairman.

General, I appreciate your being here today and certainly you're doing an outstanding job and I look forward to working with you another year.

General LOCURCIO. Thank you very much, sir. It is a privilege to be here.

Mr. BEVILL. With regard to the new criteria the Corps has established for flood control projects, can you tell me how many projects under your jurisdiction would be affected by these new guidelines?

General LOCURCIO. Yes, sir. This budget reflects the commitment of the administration to reinvent government. In my division, we were able to reduce our fiscal year 1996 General Investigations request by nine activities. There were four new recons, two new feasibility studies, and three new preconstruction engineering and design studies that were affected. We also have three feasibility studies and four design projects under way that we will take to the completion of the current phase.

BAYOU LA BATRE, ALABAMA

Mr. BEVILL. I note that you are continuing with construction on the Bayou La Batre channel improvements. Can you tell me when this project will be completed?

General LOCURCIO. Yes, sir. The project is scheduled for completion in September of 1997.

ALABAMA RIVER BELOW CLAIBORNE LOCK AND DAM, ALABAMA

Mr. BEVILL. In fiscal year 1995, we included funds for a feasibility study of the Alabama River below Claiborne Dam. Can you give me the status of this study?

General LOCURCIO. Yes, sir, happy to do that. The reconnaissance study was initiated this January and the reconnaissance report will be completed in about one year, in January of 1996.

APALACHICOLA, CHATTAHOOCHEE, FLINT—ALABAMA, COOSA, TALAPOOSA

ALABAMA, FLORIDA, AND GEORGIA

Mr. BEVILL. Could you please comment on the status of the Alabama-Georgia-Florida water study?

General LOCURCIO. Yes, sir, that is a very important study. I am happy to report that in this case, all technical portions of that particular project are now under way. However, at this point, we are lacking some data which will not be available, critical data, until fiscal year 1996. Also, as you are aware, the Alabama delegation now has a new administration in that State. For both of these reasons, the Executive Coordinating Committee on that particular project is going to request, or has already requested, a one year extension in that study which we support. So that study should be completed in about one year.

Mr. BEVILL. I have no objections to that. Thank you.

General LOCURCIO. Thank you very much for your support, sir.

CARRYOVER

Mr. BEVILL. Now, you have reported a $30 million carryover from fiscal year 1995. Can you comment on why you have been unable to obligate these funds in 1995?

General LOCURCIO. Yes, sir. Our program was based on schedules that were developed in partnership with our sponsors and were based on the ability to accomplish certain activities. Our carryover resulted from our inability to accomplish some of these activities. I will give you some examples. In some cases, sponsors were unable to acquire lands as rapidly as they anticipated. Sometimes there are not willing sellers. Sponsors were sometimes unable to acquire their share of the cost-shared funds that are required to execute the project. Sometimes we were unable to get documents approved as rapidly as expected for various reasons. They don't meet environmental constraints and coordination is held up. There were sometimes unexpected environmental, historical, or cultural features which must be added to the project to ensure that we have a complete, satisfactory and sustainable project. And the final reason is that some activities were added to our program which were beyond our capability to execute in one year and that resulted in carryover funds.

Mr. BEVILL. Very good. Thank you, Mr. Chairman.

Mr. MYERS. Thank you.

General, the carryover is a concern to many of us here. It seems like every division had a large carryover and one of the reasons everybody has given is they have been unable to sometimes have the local sponsor come up with their share, their commitment, 25 percent. How in the world are they going to come up with 75 percent? We might as well go out of business, if that is the wishes of the Congress, to go along with this Administration in reversing, changing the playing field and the rules of the game. I know that wasn't decided at your level but it seems to me we are really going to have problems. My question is, how many of the programs that are presently under consideration, either at some stage in planning and engineering or whatever it might be, how many communities are realizing this is going to happen to them?

General LOCURCIO. We haven't gotten a tremendous amount of feedback from the field on this particular subject yet, though I expect as the policy sinks in, we will begin to hear from our partners.

Mr. MYERS. You think very many sponsors are aware of the change in the rules, or proposed change?

General LOCURCIO. They are becoming aware at this point. We are planning a partnering conference and we have added this particular item to the agenda to ensure that they are completely aware of this proposed change in policy. I will say that what will be necessary, I think, is prior planning and programming on the part of the States to be able to absorb this change in the cost-sharing policy.

Mr. MYERS. Well, it is a concern to each of us here on this committee. We are confused how you apply the policy and how the new criteria work. As an example, you showed some floods there in Atlanta. I think there were two in South Carolina.

General LOCURCIO. That is correct.

ATLANTA WATERSHED, GEORGIA

Mr. MYERS. Atlanta, is that going to be able to meet the criteria of 50 percent or more falling outside the State? With the smaller rivers, is that going to fall outside the state?

General LOCURCIO. That particular project, if my recollection is correct, is primarily inside the State and the reconnaissance study will probably determine flooding to be 100 percent from waters that are confined to the State of Georgia so that study would fall under the new criteria, and the current phase of that study would be completed. Upon completion of that phase, then we would negotiate with the States to see how they want to proceed from that point forward. But basically it would be their responsibility.

Mr. MYERS. I am sure Georgia and a lot of other States are going to be concerned when they realize they are going to have the full responsibility for studies and projects where historically, traditionally, the Corps has taken care of them.

General LOCURCIO. That is correct.

Mr. MYERS. Also, I see, you have beach renourishment and erosion control.

General LOCURCIO. Beach erosion control, yes, sir.

Mr. MYERS. Why does that fall differently than if you live along a river and you are flooded every year? Why are you going to take care of that beach front there? That water came from clear across the Atlantic. What makes the difference? I fail to see this analogy and the reasoning that has gone into this decision. Can you defend it?

General LOCURCIO. In the case of some beach erosion control projects, there are existing renourishment agreements that will expire in a certain number of years, typically 50 years. All of those projects would be allowed to complete through the existing contractual agreements with the sponsor. Beyond that period, then they would fall under the new policy.

PUERTO RICO

Mr. MYERS. Also in Puerto Rico, how in the world is any Puerto Rican program going to fall under the new criteria and be built? The committee is quite familiar with the problems in San Juan and elsewhere in Puerto Rico but how in the world are they going to qualify?

General LOCURCIO. It is obvious there won't be interstate waters in Puerto Rico.

Mr. MYERS. No way they are going to qualify for projects. No way.

General LOCURCIO. There were interstate highways in Hawaii so there are exceptions to the rule, and I am sure that a case-by-case exception will be made in the case of Puerto Rico. I think that will be necessary.

CENTRAL AND SOUTHERN FLORIDA, FLORIDA

Mr. MYERS. Don't be sure of it, but the canals that you had—I think one canal in the Everglades and some more canals in Florida, won't they fall under the same criteria?

General LOCURCIO. They potentially will, sir.

Mr. MYERS. They are not navigation canals?

General LOCURCIO. No, sir, they are not. They are flood control, basically flood control and environmental restoration.

KISSIMMEE RIVER, FLORIDA

Mr. MYERS. Now my other question, the Kissimmee River, how close to completion is that project?

General LOCURCIO. It is just under way, sir. We are just completing design work on portions of it. I would have to look at my notes to come up with the exact completion date. Currently, the final completion of the whole project will be in September 2009.

Mr. MYERS. Well, I don't know whether it was a mistake or not for us to straighten out the river and make it more accessible for various reasons, but I don't think we can get into correcting every mistake we have made in the past. It seems some of them we have to live with, and I have always been concerned about restoration. How high a priority is it today? Is the pressure coming from environmentalists more than anything else?

General LOCURCIO. I think that I wouldn't characterize the Kissimmee as correcting a mistake, sir.

Mr. MYERS. It wasn't a mistake?

General LOCURCIO. No, sir. I think we have embarked upon expressing a new value system for more sustainable projects, and a shift in the priorities of the citizens of our Nation away from projects which are justified purely on their economics, the economic basis of projects, to ones which are environmentally, as well as economically, sustainable. So we are now, if you will, designing to different purposes than we did back when those projects were built, and we are also reflecting new scientific and other data, engineering data, that we have available to us that we didn't have back when we built those projects.

Mr. MYERS. Well, we design most everything differently now than we did 25 years ago. If you use that criteria, we would go back and correct everything we built, including dams and reservoirs, and levees.

General LOCURCIO. That is correct. I think on a selective basis, sir, my answer would be, we have to do a case-by-case analysis and where we have significant new information and we can make significant improvements or where it is absolutely necessary, then we should consider those.

Mr. MYERS. Well, why don't we apply the same criteria for that project as we do all the others, it has got to meet the three tests?

General LOCURCIO. I can't answer that question, sir.

Mr. MYERS. I think if we are going to do it, I think we probably—as far as I am concerned, we ought to apply that same rule. What is good for Carolina, Alabama, Washington, Oregon, California, or Maine, it is going to be good, I think, for Florida.

General LOCURCIO. Yes, sir.

OLYMPICS

Mr. MYERS. I know other agreements have been made, but my last question is about the Atlanta Olympics. You mentioned that.

General LOCURCIO. Yes, sir.

Mr. MYERS. What role are you playing in preparing Atlanta for the Olympics?

General LOCURCIO. Well, several of the venues will occur on Corps of Engineers' sites. Like one will be used for the rowing venue. In Savannah, the sailing venue will occur and there, we are involved in terms of permitting certain sites. Beyond that, we are involved at many of our sites. The campgrounds and facilities that the Corps operates would be used by visitors to this region. We are expecting a tremendous influx of visitors to the region. Not all will stay in hotels and many, many of them are going to be staying at Corps of Engineers' lakes and campgrounds. So we are preparing to absorb those loads of visitors and make sure that their experience is acceptable, supportable, and beneficial to them.

Mr. MYERS. How much of your request this year has to do with the Olympic preparation?

General LOCURCIO. Very little, sir, in terms of actual dollars. It is just a concentration of our planning efforts to support what we know is going to be a full load of visitors. So we really don't have a specific request to support the Olympics per se. Zero is the specific number that Mr. Osborne gave me.

Mr. MYERS. Kind of hard to beat that; isn't it?

General LOCURCIO. We are very efficient in Atlanta, sir.

Mr. MYERS. I will zero out and recognize Mr. Bunn.

Mr. BUNN. Mr. Chairman, I don't have any questions at this point.

Mr. MYERS. We had this hearing for you freshmen. We have heard them before. They just change a few dollars once in awhile in there. Projects stay on forever.

Mr. BEVILL.

COST SHARING

Mr. BEVILL. Gentlemen, you know—do you know of a single city in the United States that can meet that criteria for paying 75 percent?

General LOCURCIO. Well, Mr. Bevill, I would have to do some research to try to come up with that answer. Not off the top of my hand.

Mr. BEVILL. You would have to do a lot of looking I think. I don't think you can find one, really, that can handle 75 percent of the cost.

General LOCURCIO. I would have to do some research.

Mr. BEVILL. I would, too.

General LOCURCIO. Yes, sir. A city with deep pockets.

Mr. BEVILL. It looks to me like, Mr. Chairman, we are going to have to get some changes on this. It is not going to work. It is that simple.

Mr. MYERS. If we have enough votes. It has to be decided by this Subcommittee, no question about it. Sometimes they listen to us. Sometimes they don't.

AQUATIC GROWTH

I have one other question dealing with the aquatic growth. We realize in your area it is a tremendous problem, one that has been there ever since we have been there on this Committee.

General LOCURCIO. That is correct.

Mr. MYERS. But in the O&M budget you are asking for $4 million, $4.6 million, but you canceled out the construction aquatic growth. Why is there a difference between O&M and construction?

General LOCURCIO. Yes, the O&M features support navigation. That is not part of the current policy because it supports interstate commerce. The Aquatic Plant Control Program funded by the construction appropriation involves non-navigation areas. I believe that is the rationale for the difference between the way aquatic growth is handled in those two cases.

Mr. MYERS. Do you run into any of our little problems when you clean out all that garbage?

General LOCURCIO. Yes, sir, you always do, and of course if you use the chemical method as opposed to harvesting, that has to be very, very closely coordinated with the Environmental Protection Agency.

MANGROVE

Mr. MYERS. I remember in Puerto Rico, we were visiting one time, and some people were trying to take care of the mangrove and they can't do it anymore. Can they clean the mangrove out of their canals?

General LOCURCIO. I am not familiar with that situation, sir.

Mr. MYERS. I think they told us they were stopped from doing it. That is one of the problems of the water getting away there, too. It is growing up with all this brush, I call it, but—well, thank you. Some of us have a series of questions we will provide for the record.

General LOCURCIO. We would be happy to answer those.

[The information follows:]

QUESTIONS SUBMITTED BY Mr. MYERS

GENERAL INVESTIGATIONS

ATLANTA WATERSHED, GEORGIA

Mr. MYERS. What is your authority to undertake the Atlanta Watershed, Georgia, study?

General LOCURCIO. Sir, the authority for the study is the resolution adopted on September 28, 1994 by the House Committee on Public Works and Transportation.

Mr. MYERS. You indicate that the study will examine storm drainage problems. Hasn't the Corps previously viewed storm drainage to be a local problem?

General LOCURCIO. Sir, Section 914 of the Water Resources Development Act of 1986 allows the Corps to evaluate measures to reduce or eliminate damages from flooding without regard to frequency of flooding, drainage area, or amount of runoff. At this time, the Corps' authority is limited to solving problems associated with flooding from major streams. The Atlanta Watershed study will review the stream drainage problems associated with major storm events. The Corps has no generic authority to construct improvements or facilities related to drainage systems which convey storm water runoff to the major stream. A non-federal sponsor would be responsible for 100 percent of the cost of those improvements.

NEW SAVANNAH BLUFF LOCK AND DAM, GEORGIA

Mr. MYERS. You state that the New Savannah Bluff Lock and Dam in Georgia is leased to the City of Augusta. Who is responsible for maintenance of the facility under the current lease?

General LOCURCIO. Sir, under the current lease agreement with the City of Augusta, Georgia, the City is responsible for the maintenance of the lock. The Federal Government is responsible for the maintenance of the dam. Under a separate lease agreement the maintenance of the recreation areas is the responsibility of Richmond County, Georgia.

ALABAMA RIVER BELOW CLAIBORNE LOCK AND DAM, ALABAMA

Mr. MYERS. If you are addressing the reliability of the authorized navigation channel in the Alabama River below Claiborne Lock and Dam in the comprehensive basin-wide study, why is a separate study required?

General LOCURCIO. Sir, the Apalachicola-Chattahoochee-Flint/Alabama-Coosa-Tallapoosa study, which is being conducted in partnership with the States of Alabama, Florida and Georgia is to develop a conceptual plan for water resource management, implement interim coordination, and identify a long term coordination mechanism for future coordinated water resource decision making within the basins. The Comprehensive Study will not be developing information sufficiently detailed to support a recommendation for specific project authorizations. The reconnaissance study of the Alabama River below

Claiborne Lock and Dam will determine the need for more detailed studies to specifically identify potential alternatives including an additional lock and dam to increase the 9-foot navigation channel availability to at least 95 percent of the year in order to accommodate commercial navigation. This study could result in a recommendation for a specifically authorized project. The two studies will be closely coordinated to avoid duplication of effort and to develop consistent information.

JACKSONVILLE HARBOR, FLORIDA

Mr. MYERS. Last year, you reported that the estimated cost of the Jacksonville Harbor, Florida, feasibility study was $1,000,000. This year you indicate that the cost will be $2,266,000. What caused the estimated cost to more than double since last year?

General LOCURCIO. Sir, last year's study cost estimate was developed prior to the completion of the reconnaissance phase. As a result of this effort, the study cost estimate has increased to accomplish more extensive modeling and additional economic, engineering, and environmental investigations, necessary for the feasible study.

BRUNSWICK HARBOR, GEORGIA

Mr. MYERS. Why was the Brunswick Harbor, Georgia, feasibility study funded at full Federal expense prior to Fiscal Year 1995?

General LOCURCIO. Sir, the feasibility study was initiated prior to the enhancement of the Water Resources Development Act of 1986, which implemented study cost-sharing. Implementation guidance on the Act allowed existing studies to continue at full Federal expense. The study was suspended in Fiscal Year 1991 at the request of the local sponsor. It is being resumed in Fiscal Year 1995 under the current study cost-sharing requirements.

LOWNDES COUNTY, MISSISSIPPI

Mr. MYERS. What is the source of the Fiscal Year 1995 funds allocated to the Lowndes County, Mississippi, barge fleeting area study?

General LOCURCIO. Sir, the Fiscal Year 1995 funds were reprogrammed from funds available within the General Investigations program. These funds were determined to be excess to the current Fiscal Year needs of other activities in this program.

COAST OF FLORIDA EROSION AND STORM EFFECTS, FLORIDA

Mr. MYERS. In light of the new policy regarding Corps participation in shore protection projects, do you plan to complete the Coast of Florida Erosion and Storm Effects study?

General LOCURCIO. Sir, studies are underway in two of the five regions included in the Coast of Florida Erosion and Storm Effects Study. The final report on one region is scheduled for completion in September 1995. The feasibility phase for the other region is scheduled for completion in April 1998. In accordance with the proposed policy, no further effort would be performed on the study.

COLLIER COUNTY, FLORIDA

Mr. MYERS. What is the status of the Collier County, Florida, study?

General LOCURCIO. Sir, the reconnaissance report was completed in September 1994 and recommended further feasibility studies. However, the local sponsor, the Collier County Board of Commissioners, decided not to participate in the feasibility phase. They are proceeding on their own to construct a beach nourishment project.

LOWER SAVANNAH RIVER, GEORGIA

Mr. MYERS. Is the Lower Savannah River, Georgia, project authorized for construction?

General LOCURCIO. No, sir. The project is not authorized for construction.

WILMINGTON HARBOR CHANNEL WIDENING, NORTH CAROLINA

Mr. MYERS. Is the Wilmington Harbor Channel Widening, North Carolina, project authorized for construction?

General LOCURCIO. No, sir. The project is not authorized for construction. It is available to be included in the next Water Resources Development Act.

BRUNSWICK COUNTY BEACHES, NORTH CAROLINA

Mr. MYERS. Of the funds requested for the Brunswick County Beaches, North Carolina, project, how much is needed to complete PED for the Ocean Isle segment?

General LOCURCIO. Sir, $275,000 of the requested amount of $500,000 is needed to complete PED on the Ocean Isle segment.

MOBILE HARBOR, THEODORE SHIP CHANNEL, ALABAMA

Mr. MYERS. Please provide the Committee with a status report on the Mobile Harbor, Theodore Ship Channel, Alabama study which was funded in Fiscal Year 1995.

General LOCURCIO. Sir, a Limited Reevaluation Report, LRR, is being prepared to determine if the authorized turning basin remains justified to include maintenance. The LRR is scheduled for completion in July 1996.

MIAMI RIVER SEDIMENTS, FLORIDA

Mr. MYERS. What is the status of the Miami River Sediments, Florida, project?

General LOCURCIO. Sir, preparation of a design memorandum and the final Environmental Impact Statement are underway with completion scheduled for March 1995. However, the critical problem with the removal of materials from the Miami River and the Seybold Canal is the lack of a suitable disposal area. The current approach involves upland disposal which the local sponsor is investigating. We are continuing to work with the local sponsor to achieve a decision on the disposal plan. Further preconstruction engineering and design work is on hold pending that decision by the sponsor.

CONSTRUCTION GENERAL

BLACK WARRIOR AND TOMBIGBEE RIVERS, VICINITY OF JACKSON, ALABAMA

Mr. MYERS. Please explain the design changes that have resulted in an increase of over $11,000,000 in the cost of the Black Warrior and Tombigbee Rivers, Vicinity of Jackson, Alabama, project.

General LOCURCIO. Sir, the design changes which have resulted in the cost increase include the addition of bank protection, additional excavation in the river channel to reach the 14-foot contour, the addition of mitigation measures and the preparation of an Environmental Impact Statement.

Mr. MYERS. Why has no benefit-cost ratio been computed for the project?

General LOCURCIO. Sir, the Corps was directed by the Energy and Water Development Appropriation Act of 1987 to construct this project. Therefore, the benefit-cost ratio is not applicable.

MANATEE HARBOR, FLORIDA

Mr. MYERS. Has the project cooperation agreement for the Manatee Harbor, Florida, project been executed?

General LOCURCIO. No, sir. The project cooperation agreement scheduled for February 1995 has taken longer to negotiate than anticipated. It is now scheduled for execution in March 1995.

CRUISE SHIPS

Mr. MYERS. How do you compute benefits associated with use of projects by cruise ships?

General LOCURCIO. Sir, cruise ship benefits are not currently used in the economic analysis of navigation projects. This policy is under review at the Washington headquarters.

GULFPORT HARBOR, MISSISSIPPI

Mr. MYERS. What is the status of the Gulfport Harbor, Mississippi, project?

General LOCURCIO. Sir, the dredging contract was completed in January 1994. Data collection and analysis for the Thin Layer Demonstration Program is scheduled for completion in September 1995.

The Thin Layer report will be submitted to Congress in September 1996.

WILMINGTON HARBOR, OCEAN BAR, NORTH CAROLINA

Mr. MYERS. What is the status of the Wilmington Harbor, Ocean Bar, North Carolina, project?

General LOCURCIO. Sir, the construction contract to remove rock from the ocean bar channel was awarded in August 1994, with completion scheduled for April 1996.

LEE COUNTY, FLORIDA

Mr. MYERS. The justification sheets for the Lee County, Florida, project state that anticipated project outputs appear to be in accord with current Department of the Army policy. Isn't that inconsistent with the new policy set forth in the President's budget request?

General LOCURCIO. Sir, the Lee County project consists of three separable elements; Captiva, Estero, and Gasparilla Islands. The initial nourishment of Captiva Island was completed by the local sponsor in 1989. Federal reimbursement was made under a Section 215 agreement in Fiscal Year 1994. We are currently reviewing a request for reimbursement of the first renourishment under a new Section 215 agreement. An economic update of the remaining two islands is underway and is scheduled for completion in April 1995. If favorable, a General Reevaluation Report will be initiated with completion scheduled for September 1997. This will conclude the design phase. In accordance with the proposed policy, work will continue through the current phase or limits of any agreements. At that point, no further work would be accomplished.

PINELLAS COUNTY, FLORIDA

Mr. MYERS. How are the funds provided in Fiscal Year 1995 for the Pinellas County, Florida, project being utilized?

General LOCURCIO. Sir, the Pinellas County project consists of four separable elements; Long Key, Treasure Island, Sand Key, and Clearwater Beach Island. Fiscal Year 1995 funds are being used to initiate and complete a construction contract for the nourishment of the Upham Beach portion of Long Key. These funds are also being used to design a revetment at Upham Beach and for the renourishment of Treasure Island and Sand Key.

FORT FISHER, NORTH CAROLINA

Mr. MYERS. Has the project cooperation agreement for the Fort Fisher and Vicinity, North Carolina, project been executed?

General LOCURCIO. Yes, sir. The project cooperation agreement was executed on February 13, 1995.

MYRTLE BEACH, SOUTH CAROLINA

Mr. MYERS. Have the project cooperation agreements for the Myrtle Beach, South Carolina, project been executed?

General LOCURCIO. No, sir. The agreements were scheduled for February 1995. However, negotiations have taken longer than anticipated. They are now scheduled to be executed in March 1995.

CENTRAL AND SOUTHERN FLORIDA, FLORIDA

Mr. MYERS. How are the funds provided for the Central and Southern Florida project in Fiscal Year 1995 being utilized?

General LOCURCIO. Sir, funds provided for the project in Fiscal Year 1995 are being utilized to continue construction on the Upper St. Johns River Basin; complete the reconnaissance phase and initiate the feasibility phase for the Project Review Study; continue planning, engineering, and design of South Dade County, Herbert Hoover Dike, Kissimmee Basin, West Palm Beach Canal, Lake Okeechobee Recreation, Port Mayaca, and St. Lucie Canal Bank Stabilization; and initiate planning, engineering, and design of Canals 7, 8, and 9 of North Dade County.

Mr. MYERS. What were the recommendations of the Central and Southern Project Review reconnaissance study?

General LOCURCIO. Sir, the reconnaissance report recommended that five feasibility studies and a Section 1135 Report be accomplished to provide a more detailed analysis of the project. The Everglades Ecosystem Restoration System Study would examine the ecosystem supported by the Everglades environment. The Water Supply Preserves Study would analyze the boundary between the conservation area and urban development. The Indian River Lagoon Study would examine the impact of discharges through the Okeechobee Waterway into St Lucie Inlet and the impact of any recommended modifications. The Florida Bay Hydrodynamic Model Study would investigate the impact of changing the water distribution to the Everglades National Park and the Florida Bay as related to the salt and fresh water mix. The Kissimmee, Paradise Run, Restoration Study would evaluate the need for modification of Canal 38 to restore water flow to the Paradise Run portion of the old Kissimmee River. The Section 1135 Report will address minor modifications to features altered by the Central and Southern Florida Project.

Mr. MYERS. Will the feasibility study be cost-shared?

General LOCURCIO. Yes, sir. The feasibility studies will be cost-shared on a 50-50 percent basis by the Federal and the non-Federal sponsor, the South Florida Water Management District.

Mr. MYERS. What is the total cost of the feasibility study?

General LOCURCIO. Sir, the current estimated total cost of the feasibility studies is $5,488,000. The Federal share is $2,744,000 and the non-Federal share is $2,744,000.

PORTUGUES AND BUCANA RIVERS, PUERTO RICO

Mr. MYERS. You indicated in your statement that construction of the Portugues Dam is underway. What work is being accomplished?

General LOCURCIO. Sir, the foundation preparation for the Portugues Dam is divided into two contracts. The first contract for the excavation of the left abutment is underway, scheduled to be completed in August 1995. The contract includes project site preparation and bank stabilization. The second contract for excavation of the right abutment is scheduled for award in June 1995, with completion scheduled for April 1996.

Mr. MYERS. Has the local sponsor acquired the lands required for construction of the Portugues Dam?

General LOCURCIO. Sir, real estate acquisition is phased to coincide with the construction of the project. Acquisition for the first excavation contract has been completed. Lands required for the second excavation contract will be obtained by March 1995. Land acquisition for the dam and work site requirements is scheduled for completion in November 1996.

RIO DE LA PLATA, PUERTO RICO

Mr. MYERS. When will construction of the Rio de La Plata, Puerto Rico, project begin?

General LOCURCIO. Sir, the Project Cooperation Agreement is scheduled for execution in April 1995. Upon execution, the local sponsor, Puerto Rico Department of Natural Resources, will initiate real estate acquisition and relocations for the first contract. This effort is scheduled for completion in April 1997. The initial construction contract will be awarded in October 1997.

SAVANNAH HARBOR DEEPENING, GEORGIA

Mr. MYERS. How are the funds provided in Fiscal Year 1995 for the Savannah Harbor Deepening, Georgia, project being utilized?

General LOCURCIO. Sir, of the $11,585,000 appropriated in Fiscal Year 1995, $2,083,000 is being used to design and construct a cost-shared recreation enhancement and public access project in the City of Savannah, Georgia. The remaining funds are being used to reimburse the local sponsor for the Federal share of the harbor deepening portion of the project which was completed in April 1994.

OPERATION AND MAINTENANCE

DAUPHIN ISLAND BAY, ALABAMA

Mr. MYERS. How will the funds requested in Fiscal Year 1996 for the Dauphin Island Bay, Alabama, project be utilized?

General LOCURCIO. Sir, Fiscal Year 1996 funds will be used to perform periodic maintenance dredging of the project channels.

CONDITION AND OPERATION STUDIES

Mr. MYERS. What are condition and operation studies?

General LOCURCIO. Sir, condition and operation studies are studies that evaluate project conditions and review the operational procedures to determine the need for maintenance activities. Those studies include hydrographic surveys to determine the channel depths and widths available for vessels using the channel.

COOPER RIVER, SOUTH CAROLINA

Mr. MYERS. Please explain the decrease in payments to Power Authority for the Cooper River, South Carolina, project.

General LOCURCIO. Sir, construction of the Cooper River project diverted flow from the Cooper River to the Santee River, resulting in an energy loss to Santee Cooper Power Authority. Close partnering over the past year has resulted in a negotiated flow modification which will increase flow in the Cooper River from 3000 to 4500 cubic feet per second. This additional flow will increase power sales for Santee Cooper and reduce the credit required. The renegotiated agreement also adjusted the value of the power generated by the increased flows which also contributed to the credit reduction.

W. KERR SCOTT DAM AND RESERVOIR, NORTH CAROLINA

Mr. MYERS. What will the new management center at the W. Kerr Scott Dam and Reservoir, North Carolina, project be used for?

General LOCURCIO. Sir, the new management center will be used to house the management functions for the project. It will include restroom facilities for an adjacent day use area and an interpretive center for the visiting public.

Mr. MYERS. Why is it needed?

General LOCURCIO. Sir, the new management center is needed because the existing facility is undersized for the current operational requirements. The existing facility was designed and constructed to support a staff of four people with limited use by the public. The current staffing requirement is 15 people on a seasonal basis. This additional staffing is a result of increased management responsibilities in the areas of hazardous waste, forest and wildlife management, and more coordination with state and local governments. Also, additional support for the visiting public is needed.

TENURE

Mr. MYERS. We appreciate again your testimony today.

Now, how much longer are you staying with us?

General LOCURCIO. Sir, as long as I can.

Mr. MYERS. Tom and I feel the same way about that. We know that our contract is up here periodically.

Mr. BEVILL. Ours is a little more vulnerable than his.

General LOCURCIO. Sir, I have a contract like yours. I have five years to get promoted. If I don't, then I have to leave. I have already used up two, so I have three more.

Mr. MYERS. We still expire before you, our term, our contract does.

We wish you well and thank you for your testimony. Thanks for the good job you are doing.

General LOCURCIO. Thank you very much for your patience and attention, sir.

Mr. MYERS. Thank you.

WEDNESDAY, FEBRUARY 22, 1995.

LOWER MISSISSIPPI VALLEY DIVISIONS

WITNESSES

BRIG. GEN. EUGENE S. WITHERSPOON, COMMANDER, LOWER MISSISSIPPI VALLEY DIVISION AND PRESIDENT, MISSISSIPPI RIVER COMMISSION

FRED CAVER, DIRECTOR OF PROGRAMS MANAGEMENT

CECIL BRYANT, CHIEF OF PROGRAMS MANAGEMENT AND ANALYSIS DIVISION

Mr. MYERS. Well, the committee is pleased to welcome the gentleman from Vicksburg, the Lower Mississippi Valley Division, General Witherspoon. Your entire prepared statement will be in the record and you can proceed as you care.

General WITHERSPOON. Thank you, sir.

Mr. Chairman and distinguished Members of the committee, I am pleased to appear before you to report on the status of civil works activities in the Lower Mississippi Valley Division and the Mississippi River Commission. Assisting me is Mr. Fred Caver, Director of Programs Management. Fred is on my right. And to my left, Mr. Cecil Bryant, also from Programs Management. In addition, seated somewhere behind me is Mr. Sam Angel, civilian member of the Mississippi River Commission.

AREA OF RESPONSIBILITY

Our area of responsibility encompasses nearly 1,300 miles along the lower Mississippi River. This area includes all or portions of seven States. In addition to serving as Division Engineer of the Lower Mississippi Valley Division, I am also President of the Mississippi River Commission which has civil works responsibility for the Mississippi River and Tributaries project located in the alluvial valley of the Mississippi River below Cape Girardeau, Missouri.

This great interstate corridor, which is the Mississippi River, poses some of the Nation's greatest flood control, navigation, and environmental challenges. The Mississippi is the trunk of a treelike navigation system that extends into the heart of the Nation. During 1992, this great waterway carried 491 million tons of commerce. The Nation's largest port and four of the eight largest, in terms of tonnage, are served by the Mississippi River. Along with other commodities, 56 percent of the grain exported from the United States travels down the Mississippi and through Mississippi River ports in south Louisiana.

The MR&T project provides a comprehensive flood control and navigation system consisting of 3,422 miles of levees and floodwalls as well as dikes, revetments, and other features. This system is interstate in character. For example, flood protection in Louisiana is directly dependent on the integrity of the system in Arkansas.

Since 1928, the Nation has invested $8.6 billion in this monumental undertaking. The return to the American people has been $162.5 billion just in flood damages prevented. Total project benefits, including reduced transportation costs resulting from navigation, are estimated at $314.1 billion. The MR&T system does not extend to the middle and upper Mississippi River areas which are still recovering from the great Midwest Flood of 1993.

THE FLOOD OF 1993

During the past year, we completed final repairs in 41 of 47 levee districts within my division boundaries that were damaged by the flood of 1993. Minor repairs in five other levee districts are ongoing and we expect completion in 46 of the 47 districts by the end of next month. Final repairs to the St. Louis floodwall should be completed in the first quarter of fiscal year 1996.

Without question, the flood fight and restoration effort has been our first priority mission; however, there was a secondary negative impact in the form of reduced fiscal performance on the rest of our program.

FISCAL YEAR 1994 PROGRAM PERFORMANCE

In fiscal year 1994, we effectively utilized 86 percent of the MR&T funds available to us and we were able to use 97 percent of our Operations and Maintenance, General, funds. We were not able to execute nearly as well with the General Investigations and Construction, General, appropriations where we expended only 44 and 67 percent, respectively.

In addition to the flood of 1993, our overoptimistic scheduling of studies and projects and several other factors contributed to our poor program execution. Over the past few years, we have lost significant numbers of experienced people, 16 percent of our work force just since 1993, and have expended a great deal of effort in restructuring our organization for the future.

These very necessary actions are part of our contribution to the downsizing of the Federal Government and making it more efficient. However, as with any such big change, there is an adjustment period to go through as we change our business processes. We have resolved to correct this most recent poor performance trend.

In developing our fiscal year 1996 budget, we completely reevaluated all of our project schedules to assure they are realistic and achievable. As a result of this reevaluation, we identified $28.4 million available in fiscal year 1995 that cannot be expended. These funds have been programmed to carryover into fiscal year 1996, thereby reducing our fiscal year 1996 budget request.

FISCAL YEAR 1996 PROGRAM SUMMARY

The fiscal year 1996 total program requirement for the Lower Mississippi Valley Division and the Mississippi River Commission is $644.3 million before assignment of savings and slippage.

LOWER MISSISSIPPI VALLEY DIVISION PROGRAM

I will now discuss the Lower Mississippi Valley Division program which includes $258.5 million in new budget authority and $28.4 million in programmed carryover for a total of $286.9 million.

GENERAL INVESTIGATIONS

Our fiscal year 1996 General Investigations program requires $6.8 million, of which $2.1 million is available from carryover.

SURVEYS

NAVIGATION

Continuing navigation studies are focused on replacement locks or additional locks for the Intracoastal Waterway and widening the narrow channel and providing anchorages in the Lake Charles Ship Channel in Louisiana.

FLOOD DAMAGE PREVENTION

Funding requested for fiscal year 1996 will be used on studies addressing possible measures to prevent flood damages, including a new start study for McKinney Bayou in Arkansas and continuation of six others. Carryover funds will be used for completion of a feasibility study for the Jackson Metropolitan area in Mississippi and continuation of four other studies.

PRECONSTRUCTION ENGINEERING AND DESIGN

FLOOD CONTROL

Preconstruction engineering and design efforts to provide flood control will continue on projects such as the West Bank—East of Harvey Canal Hurricane Protection project in the New Orleans metropolitan area.

CONSTRUCTION, GENERAL, PROGRAM

Our fiscal year 1996 total program requirement for the Construction, General, program is $80.8 million, which includes $2.9 million from the Inland Waterways Trust Fund. The total requirement includes $54.5 million in new budget authority and $26.3 million in carryover. Required funds will provide for initiation of design deficiency corrections at Rend Lake, Illinois, and rehabilitation of Mississippi River Lock and Dam 24, and continuation of 15 other projects.

NAVIGATION IMPROVEMENTS

Development and expansion of the navigation infrastructure within our division continues.

MISSISSIPPI RIVER SHIP CHANNEL,

GULF TO BATON ROUGE, LOUISIANA

Phase II construction on the Mississippi River Ship Channel project was completed in December 1994, providing 45-foot navigation from Baton Rouge, Louisiana, to the Gulf. Program carryover into fiscal year 1996 will be used to complete a salt water intrusion mitigation contract.

MELVIN PRICE LOCK AND DAM, ILLINOIS AND MISSOURI

On the Melvin Price project, the 600-foot auxiliary lock was placed in operation in October 1994. In fiscal year 1996, construction will be initiated on an access road on the Illinois side and on a visitor's center.

RED RIVER WATERWAY, MISSISSIPPI RIVER TO SHREVEPORT, LOUISIANA

A long-term commitment was met when Pools 4 and 5 of the Red River Waterway project were opened for limited navigation on December 31, 1994. Since then, the Caddo-Bossier Port has opened near Shreveport, Louisiana. A dedication for the entire waterway is scheduled for May of this year. In fiscal year 1996, construction of capouts and recreation features will continue along with the mitigation of project impacts.

HURRICANE PROTECTION

Continuation of the Lake Pontchartrain and Vicinity and Westwego to Harvey Canal projects in fiscal year 1996 will provide hurricane protection to highly urbanized areas in south Louisiana.

OPERATION AND MAINTENANCE, GENERAL

Our request for Operation and Maintenance, General, funds in fiscal year 1996 is $199.3 million. Requested funds will provide for the continued operation and maintenance at 45 completed projects.

MISSISSIPPI RIVER AND TRIBUTARIES PROGRAM

The fiscal year 1996 budget request for the Mississippi River and Tributaries program is $357.4 million before assignment of savings and slippage.

GENERAL INVESTIGATIONS

The General Investigation, request of $5.3 million will allow continuation of three feasibility studies and two preconstruction engineering and design efforts.

SURVEYS

Continuing studies involve hurricane protection needs for Terrebonne Parish in the Morganza to the Gulf of Mexico area in Louisiana; flood control needs for the Sunflower River Basin in the Mississippi Delta in Mississippi; and flood control and environmental needs in the Reelfoot Lake area in Tennessee and Kentucky.

CONSTRUCTION

The fiscal year 1996 MR&T construction request for $217.9 million will allow for continuation of 13 projects and completion of one.

MISSISSIPPI RIVER LEVEES

On the Mississippi River Levees Project, we will continue construction of required levee enlargements in areas of severe grade deficiency.

CHANNEL IMPROVEMENT

Under the Channel Improvement project, fiscal year 1996 funds are requested to place 5.7 miles of revetments. For many years, this work has been accomplished with two revetment plants, one based in Memphis, Tennessee, and one in Vicksburg, Mississippi. However, the need for two separate revetment plants has diminished as the revetment construction program nears completion and the annual program decreases.

Manpower reductions through voluntary separations in late 1993 and early 1994 allowed a consolidation earlier than planned without any adverse impact to permanent employees. The consolidation was accomplished with great success.

ATCHAFALAYA BASIN, LOUISIANA

Requested funds will allow continuation of levee enlargements, revetment construction, and a reevaluation study of the Lower Atchafalaya River and surrounding area in the Atchafalaya Basin in Louisiana.

MISSISSIPPI AND LOUISIANA ESTUARINE AREAS,

MISSISSIPPI AND LOUISIANA

The Mississippi and Louisiana Estuarine Areas project, to divert water from the Mississippi River to the Lake Pontchartrain Basin and Mississippi Sound, has been undergoing an extensive reanalysis by a joint task force of Federal, State, and environmental interests, with academic input from area universities. An evaluation of significant proposals should be available in March of this year.

YAZOO BASIN, MISSISSIPPI

Funds requested for fiscal year 1996 will provide for continued construction of the Yazoo Basin, Mississippi, flood control project. Included are continuation of reformulation studies of the Yazoo Backwater and Headwater Tributaries portions of the project and the Demonstration of the Erosion Control Program. Work will continue on the reformulated Upper Yazoo Projects and Upper Steele Bayou portion of the project.

WEST TENNESSEE TRIBUTARIES, TENNESSEE

Construction of channel protection will continue on the West Tennessee Tributaries in Tennessee to assure that the channels along bridge and utility crossings in the uncompleted portion of the project are protected from effects of the completed channel work. At the request of the State of Tennessee, we have also initiated two small demonstration projects to determine if a reformulation of the entire basin is warranted. A reformulated project could potentially satisfy the concerns of both flood control and environmental interests in the area who have long been at odds.

MAINTENANCE

Our fiscal year 1996 request for Mississippi River and Tributaries Maintenance is $134.2 million. And this request will provide for continued operations and maintenance activities on 33 completed projects.

Mr. Chairman, this completes my oral report.

Mr. MYERS. Well, thank you, General Witherspoon.

[The statement of General Witherspoon follows:]

DEPARTMENT OF THE ARMY

CORPS OF ENGINEERS

LOWER MISSISSIPPI VALLEY DIVISION

MISSISSIPPI RIVER COMMISSION

COMPLETE STATEMENT

OF

BRIGADIER GENERAL EUGENE S. WITHERSPOON

COMMANDER, LOWER MISSISSIPPI VALLEY DIVISION
AND
PRESIDENT, MISSISSIPPI RIVER COMMISSION

BEFORE THE

SUBCOMMITTEE ON ENERGY AND WATER DEVELOPMENT

COMMITTEE ON APPROPRIATIONS

UNITED STATES HOUSE OF REPRESENTATIVES

ON THE

FISCAL YEAR 1996 CIVIL WORKS BUDGET

FEBRUARY 22, 1995

STATUS REPORT

REPORT OF BRIGADIER GENERAL EUGENE S. WITHERSPOON, COMMANDER, LOWER MISSISSIPPI VALLEY DIVISION AND PRESIDENT, MISSISSIPPI RIVER COMMISSION.

AREA OF RESPONSIBILITY

OUR AREA OF RESPONSIBILITY ENCOMPASSES NEARLY 1,300 MILES ALONG THE MISSISSIPPI RIVER FROM NEAR HANNIBAL, MISSOURI, TO THE GULF OF MEXICO. THIS AREA INCLUDES ALL OR PORTIONS OF SEVEN STATES. AS DIVISION ENGINEER OF THE LOWER MISSISSIPPI VALLEY DIVISION, I AM ALSO PRESIDENT OF THE MISSISSIPPI RIVER COMMISSION WHICH HAS CIVIL WORKS RESPONSIBILITY FOR THE MISSISSIPPI RIVER AND TRIBUTARIES PROJECT LOCATED IN THE ALLUVIAL VALLEY OF THE MISSISSIPPI RIVER FROM NEAR CAPE GIRARDEAU, MISSOURI, TO THE GULF OF MEXICO.

THIS GREAT INTERSTATE CORRIDOR WHICH IS THE MISSISSIPPI RIVER POSES SOME OF THE NATION'S GREATEST FLOOD CONTROL, NAVIGATION AND ENVIRONMENTAL CHALLENGES. THE MISSISSIPPI IS THE TRUNK OF A TREELIKE NAVIGATION SYSTEM THAT EXTENDS INTO THE HEART OF THE NATION. DURING 1992, THIS GREAT WATERWAY CARRIED 491 MILLION TONS OF COMMERCE. THE NATION'S LARGEST PORT AND FOUR OF THE EIGHT LARGEST, IN TERMS OF TONNAGE, ARE DIRECTLY FED BY THE MISSISSIPPI RIVER. ALONG WITH OTHER COMMODITIES, 56 PERCENT OF THE GRAIN EXPORTED FROM THE UNITED STATES TRAVELED DOWN THE MISSISSIPPI AND THROUGH MISSISSIPPI RIVER PORTS IN SOUTH LOUISIANA.

THE MR&T PROJECT PROVIDES A COMPREHENSIVE FLOOD CONTROL AND NAVIGATION SYSTEM CONSISTING OF 3,422 MILES OF LEVEES AND FLOODWALLS AS WELL AS DIKES, REVETMENTS, AND OTHER FEATURES. THIS SYSTEM IS INTERSTATE IN CHARACTER. FOR EXAMPLE, FLOOD PROTECTION IN LOUISIANA IS DIRECTLY DEPENDENT ON THE INTEGRITY OF THE SYSTEM IN ARKANSAS. SINCE 1928, THE NATION HAS INVESTED $8.6 BILLION IN THIS MONUMENTAL UNDERTAKING. THE RETURN TO THE AMERICAN PEOPLE HAS BEEN $162.5 BILLION JUST IN FLOOD DAMAGES PREVENTED. TOTAL PROJECT BENEFITS, INCLUDING REDUCED TRANSPORTATION COSTS RESULTING FROM NAVIGATION, ARE ESTIMATED AT $314.1 BILLION. THIS SYSTEM DOES NOT EXTEND TO THE MIDDLE AND UPPER MISSISSIPPI RIVER AREAS WHICH ARE STILL RECOVERING FROM THE GREAT MIDWEST FLOOD OF 1993.

THE FLOOD OF 1993

DURING THE PAST YEAR WE COMPLETED FINAL REPAIRS IN 41 OF 47 LEVEE DISTRICTS WITHIN MY DIVISION BOUNDARIES DAMAGED BY THE FLOOD OF 1993. MINOR REPAIRS IN 5 OTHER LEVEE DISTRICTS ARE ONGOING, AND WE EXPECT COMPLETION IN 46 OF THE 47 DISTRICTS BY THE END OF NEXT MONTH. FINAL REPAIRS TO THE ST. LOUIS FLOODWALL SHOULD BE COMPLETED IN THE FIRST QUARTER OF FISCAL YEAR 1996. A RECENTLY IDENTIFIED NEED FOR REPAIR OF FLOOD DAMAGES TO RELIEF WELLS IN FEDERAL LEVEES IS STILL BEING EVALUATED.

WITH THE POSSIBILITY OF SPRINGTIME HIGH WATER ALONG THE MISSISSIPPI RIVER, I AM PLEASED TO REPORT THAT ALL LEVEES WILL PROVIDE FULL HEIGHT PROTECTION TO THE HOMES, INDUSTRIES, AND FARMLANDS THEY SURROUND.

THE REPAIR PROGRAM INVOLVED MOST OF THE ST. LOUIS DISTRICT STAFF AND NEARLY 200 ADDITIONAL ENGINEERS AND SUPPORT PERSONNEL FROM OTHER CORPS DISTRICTS AND FEDERAL AGENCIES. THESE DEDICATED PROFESSIONALS WORKED TIRELESSLY FOR OVER EIGHT MONTHS TO REESTABLISH THE LEVEE SYSTEMS TO PRE-FLOOD CONDITION.

WITHOUT QUESTION, THE FLOOD FIGHT AND RESTORATION EFFORT HAS BEEN OUR FIRST PRIORITY MISSION; HOWEVER, THERE WAS A SECONDARY NEGATIVE IMPACT IN THE FORM OF REDUCED FISCAL PERFORMANCE ON THE REST OF OUR PROGRAM.

FISCAL YEAR 1994 PROGRAM PERFORMANCE

IN FISCAL YEAR 1994, WE EFFECTIVELY UTILIZED 86 PERCENT OF THE MR&T FUNDS AVAILABLE TO US. WE WERE ABLE TO USE 97 PERCENT OF OUR OPERATIONS AND MAINTENANCE, GENERAL FUNDS. WE WERE NOT ABLE TO EXECUTE NEARLY AS WELL WITH THE GENERAL INVESTIGATIONS AND CONSTRUCTION, GENERAL APPROPRIATIONS WHERE WE EXPENDED ONLY 44 PERCENT AND 67 PERCENT, RESPECTIVELY, OF THE FUNDS AVAILABLE.

IN ADDITION TO THE FLOOD OF 1993, OUR OVER OPTIMISTIC SCHEDULING OF STUDIES AND PROJECTS AND SEVERAL OTHER FACTORS CONTRIBUTED TO OUR POOR PROGRAM EXECUTION. OVER THE PAST FEW YEARS WE HAVE LOST SIGNIFICANT NUMBERS OF EXPERIENCED PEOPLE, 16 PERCENT OF OUR WORKFORCE JUST SINCE 1993, AND HAVE EXPENDED A GREAT DEAL OF EFFORT IN RESTRUCTURING OUR ORGANIZATION FOR THE FUTURE. THESE VERY NECESSARY ACTIONS ARE PART OF OUR CONTRIBUTION TO DOWNSIZING THE FEDERAL GOVERNMENT AND MAKING IT MORE EFFICIENT. HOWEVER, AS WITH ANY SUCH BIG CHANGE, THERE IS AN ADJUSTMENT PERIOD TO GO THROUGH AS WE CHANGE OUR BUSINESS PROCESSES. WE HAVE RESOLVED TO CORRECT THIS POOR PERFORMANCE TREND. IN DEVELOPING OUR FISCAL YEAR 1996 BUDGET, WE COMPLETELY REEVALUATED ALL OF OUR PROJECT SCHEDULES TO ASSURE THEY ARE REALISTIC AND ACHIEVABLE. AS A RESULT OF THIS REEVALUATION, WE IDENTIFIED $28.4 MILLION AVAILABLE IN FISCAL YEAR 1995 THAT CANNOT BE EXPENDED. THESE FUNDS HAVE BEEN PROGRAMMED TO CARRYOVER INTO FISCAL YEAR 1996 THEREBY REDUCING OUR FISCAL YEAR 1996 BUDGET REQUEST.

WOMEN AND MINORITY CONTRACTING

FISCAL YEAR 1994 PROGRAM EXECUTION HIGHLIGHTS INCLUDED A DOUBLING OF THE DOLLAR VALUE AND NUMBER OF ARCHITECTURAL AND DESIGN CONTRACTS AWARDED TO WOMEN AND MINORITIES WHILE THE DOLLAR VALUE AND NUMBER OF SUCH CONTRACTS AWARDED TO AFRICAN-AMERICAN LED FIRMS INCREASED BY 50 PERCENT.

IN TERMS OF WOMEN-OWNED BUSINESS UTILIZATION OUR FISCAL YEAR 1994 PERFORMANCE DECREASED BY $4.6 MILLION FROM THE PRECEDING YEAR; HOWEVER, I AM PLEASED TO REPORT THAT OUR FISCAL YEAR 1994 CONTRACTS WITH SMALL DISADVANTAGED BUSINESSES TOTALED $13.3 MILLION OVER FISCAL YEAR 1993.

FISCAL YEAR 1996 PROGRAM SUMMARY

THE FISCAL YEAR 1996 TOTAL PROGRAM REQUIREMENT FOR THE LOWER MISSISSIPPI VALLEY DIVISION AND THE MISSISSIPPI RIVER COMMISSION IS

$644.3 MILLION BEFORE ASSIGNMENT OF SAVINGS AND SLIPPAGE. THIS REQUIREMENT INCLUDES $615.9 MILLION IN NEW BUDGET AUTHORITY AND $28.4 MILLION IN PROGRAMMED UNOBLIGATED CARRYOVER FROM PRIOR YEARS. THIS COMPARES TO $609.0 MILLION ALLOCATED FOR FISCAL YEAR 1995. THE CONSTRUCTION PROGRAM ACCOUNTS FOR $298.7 MILLION, OR ABOUT 46 CENTS OF EACH DOLLAR; OPERATIONS AND MAINTENANCE OF EXISTING PROJECTS ACCOUNT FOR $333.5 MILLION, OR ABOUT 52 CENTS OF EACH DOLLAR; AND GENERAL INVESTIGATIONS FOR POTENTIAL PROJECTS ACCOUNT FOR $12.1 MILLION, OR ABOUT 2 CENTS OF EACH DOLLAR.

LOWER MISSISSIPPI VALLEY DIVISION PROGRAM

FIRST I WILL DISCUSS THE LOWER MISSISSIPPI VALLEY DIVISION PROGRAM WHICH TOTALS $286.9 MILLION FOR FISCAL YEAR 1996. INCLUDED ARE $258.5 MILLION IN NEW BUDGET AUTHORITY AND $28.4 MILLION IN PROGRAMMED UNOBLIGATED CARRYOVER FROM PRIOR YEARS.

GENERAL INVESTIGATIONS

OUR FISCAL YEAR 1996 LOWER MISSISSIPPI VALLEY DIVISION GENERAL INVESTIGATIONS PROGRAM REQUIRES $6.8 MILLION OF WHICH $2.1 MILLION IS AVAILABLE FROM PROGRAMMED UNOBLIGATED CARRYOVER. REQUIRED FUNDS WILL PROVIDE FOR CONTINUATION OF THREE NAVIGATION STUDIES AND TEN FLOOD DAMAGE PREVENTION STUDIES, COMPLETION OF ONE FLOOD DAMAGE PREVENTION STUDY, AND INITIATION OF ONE FLOOD DAMAGE PREVENTION STUDY. IN ADDITION, WE WILL CONTINUE PRECONSTRUCTION ENGINEERING AND DESIGN EFFORTS ON THREE PROJECTS AND COMPLETE SIMILAR EFFORTS ON TWO PROJECTS. I WILL BRIEFLY COVER SOME OF THESE STUDIES.

SURVEYS

MCKINNEY BAYOU, ARKANSAS

FLOODING OF URBAN AND AGRICULTURAL PROPERTIES CONTINUES WITHIN THE MCKINNEY BAYOU AREA LOCATED ADJACENT TO THE RED RIVER IN THE VICINITY OF TEXARKANA, ARKANSAS AND TEXAS. THE MOST RECENT FLOOD OCCURRED FROM MARCH TO APRIL 1989 AND RESULTED IN DAMAGES ESTIMATED AT $2.0 MILLION. FISCAL YEAR 1996 FUNDS WILL BE USED TO INITIATE A RECONNAISSANCE STUDY OF FLOOD RELATED NEEDS.

INTRACOASTAL WATERWAY LOCKS, LOUISIANA

THE INTRACOASTAL WATERWAY LOCKS RECONNAISSANCE STUDY INDICATES AN IMMEDIATE REQUIREMENT TO REPLACE THE BAYOU SORREL LOCK. FISCAL YEAR 1995 FUNDS ARE BEING USED TO CONTINUE INTO THE FEASIBILITY PHASE. FUNDS REQUESTED FOR FISCAL YEAR 1996 WILL BE USED TO CONTINUE THE FEASIBILITY PHASE.

LAKE CHARLES SHIP CHANNEL, LOUISIANA

A NARROW CHANNEL AND LACK OF GENERAL ANCHORAGES HAVE RESULTED IN ONE-WAY TRAFFIC CONDITIONS AND SIGNIFICANT DELAYS FOR LARGE VESSELS NAVIGATING THE 36-MILE LAKE CHARLES SHIP CHANNEL. FISCAL YEAR 1995 FUNDS ARE BEING USED TO CONTINUE THE RECONNAISSANCE STUDY OF

NAVIGATION IMPROVEMENTS. FISCAL YEAR 1996 FUNDS WILL ALLOW COMPLETION OF THE RECONNAISSANCE PHASE AND CONTINUATION INTO THE FEASIBILITY PHASE OF STUDY.

MISSISSIPPI RIVER-GULF OUTLET BANK EROSION, LOUISIANA

SEVERE EROSION AND RESULTING LOSS OF VEGETATED WETLANDS CONTINUE ADJACENT TO THE NON-LEVEED BANKS OF THE MISSISSIPPI RIVER - GULF OUTLET NAVIGATION CHANNEL. ENLARGEMENT OF THE TOP WIDTH OF THE CHANNEL, CAUSED PRINCIPALLY BY SHIP AND BOAT WAKES, HAS RESULTED IN THE LOSS OF OVER 4,200 ACRES OF HIGHLY PRODUCTIVE MARCH. FISCAL YEAR 1995 FUNDS ARE BEING USED TO COMPLETE THE RECONNAISSANCE PHASE AND CONTINUE INTO THE FEASIBILITY PHASE. FUNDS REQUESTED FOR FISCAL YEAR 1996 WILL BE USED TO CONTINUE THE FEASIBILITY PHASE.

ALEXANDER AND PULASKI COUNTIES, ILLINOIS

THE ALEXANDER AND PULASKI FLOOD CONTROL STUDY AREA INCLUDES PORTIONS OF THE SIX SOUTHERNMOST ILLINOIS COUNTIES. THE RECONNAISSANCE STUDY IDENTIFIED POTENTIAL SOLUTIONS TO THE DEGRADATION OF NATIONALLY SIGNIFICANT WETLANDS HABITAT. A FEASIBILITY COST-SHARING AGREEMENT WITH THE STATE OF ILLINOIS WAS EXECUTED IN NOVEMBER 1994. FISCAL YEAR 1995 FUNDS ARE BEING USED TO CONTINUE INTO THE FEASIBILITY PHASE. FUNDS REQUESTED FOR FISCAL YEAR 1996 WILL BE USED TO CONTINUE THE FEASIBILITY PHASE.

BAYOU BARTHOLOMEW, ARKANSAS

FLOOD FLOWS ON BAYOU BARTHOLOMEW BETWEEN THE ARKANSAS-LOUISIANA STATE LINE AND BASTROP, LOUISIANA, CAUSE FLOODING AND EROSION OF FARMLANDS, FLOODING OF URBAN AND RURAL STRUCTURES, AND CLOSURE OF U.S. HIGHWAYS AND STATE AND PARISH ROADS. FISCAL YEAR 1995 FUNDS ARE BEING USED TO INITIATE A RECONNAISSANCE PHASE STUDY. FUNDS REQUESTED FOR FISCAL YEAR 1996 WILL ALLOW COMPLETION OF THE RECONNAISSANCE PHASE.

JEFFERSON PARISH AND ORLEANS PARISH, LOUISIANA

SEPARATE FEASIBILITY PHASE STUDIES OF URBAN RAINFALL FLOODING IN JEFFERSON AND ORLEANS PARISHES WERE INITIATED IN JANUARY AND JUNE, 1994, RESPECTIVELY.

FISCAL YEAR 1995 FUNDS ARE BEING USED TO CONTINUE THE FEASIBILITY PHASE. FUNDS REQUESTED FOR FISCAL YEAR 1996 WILL BE USED TO CONTINUE THE FEASIBILITY PHASE.

LAFAYETTE PARISH, LOUISIANA

A RECONNAISSANCE STUDY ADDRESSING POTENTIAL SOLUTIONS TO RESIDENTIAL, COMMERCIAL AND INDUSTRIAL FLOODING PROBLEMS IN THE VERMILION RIVER BASIN AREA OF LAFAYETTE PARISH, LOUISIANA, WAS INITIATED IN FISCAL YEAR 1994. FISCAL YEAR 1995 FUNDS ARE BEING USED TO CONTINUE THE RECONNAISSANCE PHASE. FUNDS REQUESTED FOR FISCAL YEAR 1996 WILL BE USED TO COMPLETE THE RECONNAISSANCE PHASE IN DECEMBER 1995.

ST. LOUIS REGION, MISSOURI

A RECONNAISSANCE STUDY ADDRESSING PROBLEMS DUE TO FLOODING FROM THE MISSISSIPPI AND MISSOURI RIVERS IN THE CITIES OF ST. LOUIS AND CHESTERFIELD, MISSOURI, AND IN THE COUNTIES OF JEFFERSON, STE. GENEVIEVE AND ST. LOUIS WAS INITIATED IN FISCAL YEAR 1994. FISCAL YEAR 1995 FUNDS ARE BEING USED TO CONTINUE THE RECONNAISSANCE PHASE. FISCAL YEAR 1996 FUNDS WILL BE USED TO COMPLETE THE RECONNAISSANCE PHASE AND CONTINUE INTO THE FEASIBILITY PHASE.

CARRYOVER FUNDED STUDIES

PROGRAMMED UNOBLIGATED CARRYOVER INTO FISCAL YEAR 1996 WILL FULLY FUND THE CONTINUATION AND COMPLETION OF FLOOD DAMAGE PREVENTION RECONNAISSANCE STUDIES OF BAYOU TIGRE NEAR ERATH, LOUISIANA; BLACK BAYOU DIVERSION NEAR LAKE CHARLES, LOUISIANA; LAKE DAUTERINE/LAKE FAUSSE POINTE IN ST. MARTIN AND IBERIA PARISHES, LOUISIANA; AND, ST. TAMMANY PARISH, LOUISIANA. ALSO, THE FEDERAL SHARE OF THE COST-SHARED JACKSON METROPOLITAN AREA, MISSISSIPPI, FEASIBILITY STUDY WILL BE FULLY FUNDED BY PROGRAMMED CARRYOVER INTO FISCAL YEAR 1996.

PRECONSTRUCTION ENGINEERING AND DESIGN

COMITE RIVER, LOUISIANA

THE COMITE RIVER PROJECT WAS AUTHORIZED FOR CONSTRUCTION BY THE WATER RESOURCES DEVELOPMENT ACT OF 1992. THE PROJECT PROVIDES FOR A 12 MILE DIVERSION CHANNEL AND ASSOCIATED CONTROL STRUCTURES, FISH AND WILDLIFE FEATURES, AND RECREATION FEATURES FROM THE COMITE RIVER TO THE MISSISSIPPI RIVER. FISCAL YEAR 1995 FUNDS ARE BEING USED TO CONTINUE PRECONSTRUCTION ENGINEERING AND DESIGN. FISCAL YEAR 1996 FUNDS WILL BE USED TO COMPLETE PRECONSTRUCTION ENGINEERING AND DESIGN IN SEPTEMBER 1996.

EAST BATON ROUGE PARISH, LOUISIANA

A FEASIBILITY STUDY ADDRESSING HEADWATER FLOODING ON BEAVER BAYOU, BLACKWATER BAYOU, JONES CREEK, WARD CREEK, BAYOU FOUNTAIN, CLAY CUT BAYOU, MONTE SANO BAYOU AND BAYOU MANCHAC IN EAST BATON ROUGE PARISH IS SCHEDULED FOR COMPLETION IN APRIL 1995. FISCAL YEAR 1995 FUNDS ARE BEING USED TO CONTINUE INTO PRECONSTRUCTION ENGINEERING AND DESIGN. FISCAL YEAR 1996 FUNDS WILL BE USED TO COMPLETE PRECONSTRUCTION ENGINEERING AND DESIGN IN DECEMBER 1996.

WEST BANK - EAST OF HARVEY CANAL, LOUISIANA

ON THE WEST BANK - EAST OF HARVEY CANAL PROJECT, PRECONSTRUCTION ENGINEERING AND DESIGN IS BEING INITIATED WITH FISCAL YEAR 1995 FUNDS.

THE PLAN UNDER CONSIDERATION PROVIDES FOR RAISING EXISTING LEVEES AND CONSTRUCTING NEW LEVEES TO PROVIDE HURRICANE PROTECTION IN THE AREA EAST OF THE HARVEY CANAL IN JEFFERSON AND ORLEANS PARISHES, AND THE BELLE CHASSE AREA IN PLAQUEMINES PARISH. FUNDS REQUESTED FOR FISCAL YEAR 1996 WILL BE USED TO CONTINUE PRECONSTRUCTION ENGINEERING AND DESIGN, SCHEDULED FOR COMPLETION IN DECEMBER 1996.

CONSTRUCTION, GENERAL PROGRAM

TURNING NOW TO THE LOWER MISSISSIPPI VALLEY DIVISION CONSTRUCTION PROGRAM, OUR FISCAL YEAR 1996 TOTAL PROGRAM REQUIREMENT IS $80.8 MILLION, WHICH INCLUDES $2.9 MILLION FROM THE INLAND WATERWAYS TRUST FUND. THIS TOTAL REQUIREMENT INCLUDES $54.5 MILLION IN NEW BUDGET AUTHORITY AND $26.3 MILLION IN PROGRAMMED UNOBLIGATED CARRYOVER FROM PRIOR APPROPRIATIONS. THE FISCAL YEAR 1996 PROGRAM REFLECTS A DECREASE OF $17.5 MILLION FROM OUR FISCAL YEAR 1995 ALLOCATION. REQUIRED FUNDS WILL PROVIDE FOR INITIATION OF TWO NEW CONSTRUCTION PROJECTS AND CONTINUATION OF 15 PROJECTS.

REND LAKE, ILLINOIS

FISCAL YEAR 1996 FUNDS OF $300,000 WILL BE USED TO INITIATE CONSTRUCTION TO CORRECT DESIGN DEFICIENCIES AT THE CASEY FORK AND BIG MUDDY SUBIMPOUNDMENT DAMS IN REND LAKE, ILLINOIS, THEREBY PREVENTING DESTRUCTION OF VALUABLE WILDLIFE AND WATERFOWL HABITAT.

MISSISSIPPI RIVER, LOCK AND DAM 24, ILLINOIS, AND MISSOURI

LOCK AND DAM 24 IS LOCATED NEAR CLARKSVILLE, MISSOURI, 273.5 MILES ABOVE THE MOUTH OF THE OHIO RIVER. MAJOR REHABILITATION OF PORTIONS OF THE AGED STRUCTURE WILL BE INITIATED WITH FUNDS REQUESTED FOR FISCAL YEAR 1996.

MISSISSIPPI RIVER-GULF OUTLET, LOUISIANA

ON THE MISSISSIPPI RIVER-GULF OUTLET PROJECT, WE CONTINUE TO PROGRESS IN OUR STUDIES FOR THE REPLACEMENT OF THE INNER HARBOR NAVIGATION CANAL LOCK.

STUDIES ARE FOCUSED ON A SITE NORTH OF CLAIBORNE AVENUE WHICH HAS THE POTENTIAL FOR ACHIEVING SUPPORT OF STAKEHOLDERS. FISCAL YEAR 1995 FUNDS ARE BEING USED TO CONTINUE THE REEVALUATION REPORT. FUNDS REQUESTED FOR FISCAL YEAR 1996 WILL BE USED TO INITIATE AND COMPLETE A FORESHORE PROTECTION CONTRACT AND TO COMPLETE THE REEVALUATION REPORT FOR THE INNER HARBOR NAVIGATION CANAL LOCK.

MISSISSIPPI RIVER SHIP CHANNEL, GULF TO BATON ROUGE, LOUISIANA

ON THE MISSISSIPPI RIVER SHIP CHANNEL PROJECT, THE 45-FOOT CHANNEL TO NEW ORLEANS WAS COMPLETED IN DECEMBER 1987, AND TO MILE 181 IN DECEMBER 1988. DREDGING TO PROVIDE A 45-FOOT CHANNEL BETWEEN MILE 181 AND BATON ROUGE WAS INITIATED IN JANUARY 1994 AND COMPLETED IN DECEMBER 1994 COMPLETING 45-FOOT NAVIGATION FROM BATON ROUGE TO THE GULF OF MEXICO.

FISCAL YEAR 1995 FUNDS ARE BEING USED TO COMPLETE TWO CONTRACTS AND AWARD WORK ON ONE CONTRACT FOR THE MITIGATION OF SALTWATER INTRUSION. PROGRAMMED UNOBLIGATED CARRYOVER INTO FISCAL YEAR 1996 WILL BE USED TO COMPLETE THE CONTRACT AWARDED IN FISCAL YEAR 1995.

MELVIN PRICE LOCK AND DAM, ILLINOIS AND MISSOURI

ON THE MELVIN PRICE PROJECT, THE 1200-FOOT LOCK WAS OPENED TO NAVIGATION IN FEBRUARY 1990. THE 600-FOOT AUXILIARY LOCK WAS PLACED IN OPERATION IN OCTOBER 1994. FISCAL YEAR 1996 FUNDS, INCLUDING THE REQUESTED AMOUNT AND PROGRAMMED CARRYOVER, WILL BE USED TO INITIATE CONSTRUCTION OF AN ACCESS ROAD ON THE ILLINOIS SIDE AND A VISITOR CENTER; CONTINUE SEVERAL MISCELLANEOUS ITEMS; AND COMPLETE REPLACEMENT OF THE AUXILIARY CRANE, CONSTRUCTION OF THE GUARDRAIL ON THE DAM AND REMOVAL OF THE INTERMEDIATE LOCK WALL AND DOWNSTREAM GUIDEWALL.

RED RIVER WATERWAY, MISSISSIPPI RIVER TO SHREVEPORT, LOUISIANA

A LONG TERM COMMITMENT WAS MET WHEN POOLS 4 AND 5 OF THE RED RIVER WATERWAY PROJECT WERE OPENED FOR LIMITED NAVIGATION ON DECEMBER 31, 1994. SINCE THEN THE CADDO-BOSSIER PORT HAS OPENED NEAR SHREVEPORT, LOUISIANA. THE ENTIRE WATERWAY WILL BE DEDICATED IN MAY 1995. REMAINING WORK CONSISTS OF CAPOUTS, MITIGATION AND RECREATION. THE FISCAL YEAR 1996 REQUEST OF $16.7 MILLION WILL ALLOW INITIATION OF FOUR CONTRACTS, COMPLETION OF NINE CONTRACTS, AND CONTINUATION OF MITIGATION AND RECREATION PLANNING.

EAST ST. LOUIS, ILLINOIS

THE EAST ST. LOUIS URBAN FLOOD PROTECTION PROJECT PROVIDES PROTECTION FOR A NUMBER OF COMMUNITIES LOCATED IN AN 85,000 ACRE FLOODPLAIN. FUNDS REQUESTED FOR FISCAL YEAR 1996 WILL BE USED TO CONSTRUCT A NEW GRAVITY DRAIN, FILL PIPES UNDER LEVEES AT FIFTEEN ABANDONED SMALL GRAVITY DRAINS, REHABILITATE FOUR SMALL PUMP STATIONS AND INITIATE AND COMPLETE REHABILITATION OF SEVEN LARGE PUMP STATIONS.

ALOHA-RIGOLETTE, LOUISIANA

THE ALOHA-RIGOLETTE, LOUISIANA, PROJECT WILL PROVIDE ADDITIONAL FLOOD PROTECTION TO PRINCIPALLY AGRICULTURAL LANDS IN THE EXISTING ALOHA-RIGOLETTE LEVEED AREA. A PROJECT COOPERATION AGREEMENT WITH THE CITY OF COLFAX, LOUISIANA, WAS EXECUTED IN SEPTEMBER 1994. FISCAL YEAR 1995 FUNDS ARE BEING USED TO INITIATE CONSTRUCTION. FUNDS REQUESTED FOR FISCAL YEAR 1996 WILL BE USED TO INITIATE CONTRACTS FOR THE BAYOU DARROW FLOODGATE, THE BAYOU RIGOLETTE LOW FLOW STRUCTURE, AND CHANNEL IMPROVEMENTS.

LAKE PONTCHARTRAIN, LOUISIANA, AND VICINITY

ON THE LAKE PONTCHARTRAIN AND VICINITY HURRICANE PROTECTION PROJECT, LEVEE AND FLOODWALL WORK IN ORLEANS, JEFFERSON, ST. BERNARD AND ST. CHARLES PARISHES IS CONTINUING. IN FISCAL YEAR 1995 WE WILL INITIATE SEVEN CONTRACTS AND COMPLETE EIGHT CONTRACTS. FISCAL YEAR 1996 FUNDS, INCLUDING THE REQUESTED AMOUNT AND PROGRAMMED UNOBLIGATED CARRYOVER, WILL BE USED TO CONTINUE CONSTRUCTION OF LEVEES, FLOODWALLS, FLOODGATES, BRIDGES AND MITIGATION.

LAROSE TO GOLDEN MEADOW, LOUISIANA

THE LAROSE TO GOLDEN MEADOW PROJECT WILL PROVIDE HURRICANE PROTECTION TO DEVELOPED LAND ALONG BAYOU LAFOURCHE, LOUISIANA.

IN FISCAL YEAR 1995 WE WILL AWARD ONE SECOND LIFT AND TWO THIRD LIFT LEVEE CONTRACTS. ALSO, CONSTRUCTION ON SECTION D-NORTH FIRST LIFT LEVEE AND SECTION D-SOUTH SECOND LIFT LEVEE WILL BE COMPLETED. THE D-NORTH REACH IS THE FINAL REACH OF THE FIRST LIFT LEVEE WORK.

FISCAL YEAR 1996 FUNDS, INCLUDING THE REQUESTED AMOUNT AND PROGRAMMED UNOBLIGATED CARRYOVER, WILL BE USED TO AWARD ONE SECOND LIFT AND TWO THIRD LIFT LEVEE CONTRACTS.

NEW ORLEANS TO VENICE, LOUISIANA

THE NEW ORLEANS TO VENICE PROJECT PROVIDES HURRICANE PROTECTION ALONG BOTH BANKS OF THE MISSISSIPPI RIVER SOUTH OF NEW ORLEANS.

IN FISCAL YEAR 1995, WE WILL AWARD TWO SECOND ENLARGEMENT CONTRACTS AND COMPLETE ONE FLOODWALL CAPPING CONTRACT.

FISCAL YEAR 1996 FUNDS, INCLUDING THE REQUESTED AMOUNT AND PROGRAMMED UNOBLIGATED CARRYOVER, WILL BE USED TO INITIATE TWO LEVEE ENLARGEMENT CONTRACTS AND CONTINUE TWO SECOND ENLARGEMENT LEVEE CONTRACTS.

WESTWEGO TO HARVEY CANAL, LOUISIANA

THE WESTWEGO TO HARVEY CANAL PROJECT WILL PROVIDE HURRICANE PROTECTION TO THE URBAN AREAS BETWEEN WESTWEGO AND THE HARVEY CANAL BY IMPROVING EXISTING LEVEES AND CONSTRUCTING NEW LEVEES AND FLOODWALLS.

A MAJOR ISSUE CONCERNING THIS PROJECT WAS RESOLVED IN MAY 1994. THE $51.0 MILLION IN JUDGEMENTS AWARDED IN FEBRUARY 1992 BY THE 24TH JUDICIAL COURT, STATE OF LOUISIANA, AGAINST THE WEST JEFFERSON LEVEE DISTRICT FOR LEVEE RIGHT-OF-WAY EXPROPRIATION, WERE COMPLETELY REVERSED BY THE LOUISIANA SUPREME COURT.

FISCAL YEAR 1996 FUNDS, INCLUDING THE REQUESTED AMOUNT AND PROGRAMMED UNOBLIGATED CARRYOVER, WILL BE USED TO INITIATE CONSTRUCTION OF FIRST LIFT LEVEES FROM THE NEW WESTWEGO PUMPING STATION TO ORLEANS VILLAGE AND FROM ORLEANS VILLAGE TO HIGHWAY 45. WE WILL CONTINUE CONSTRUCTION OF THE V-LEVEE FLOODWALL AND FLOODGATE WEST OF VERTEX AND HIGHWAY 45 CLOSURES, LEVEE CONSTRUCTION BETWEEN ESTELLE PUMPING STATION AND THE LOUISIANA POWER AND LIGHT POWERLINE CROSSING, AND FLOODWALL CONSTRUCTION FROM THE OLD WESTWEGO PUMPING STATION TO THE NEW WESTWEGO PUMPING STATION.

CAPE GIRARDEAU-JACKSON, MISSOURI

THE CAPE GIRARDEAU-JACKSON METROPOLITAN AREA, MISSOURI, AN URBAN FLOOD CONTROL PROJECT INITIATED IN FISCAL YEAR 1990 IS CURRENTLY 64 PERCENT COMPLETE. FISCAL YEAR 1995 FUNDS ARE BEING USED FOR CHANNEL IMPROVEMENT WORK ON WALKER BRANCH AND CAPE LACROIX CREEK.

FISCAL YEAR 1996 FUNDS, INCLUDING THE REQUESTED AMOUNT AND PROGRAMMED UNOBLIGATED CARRYOVER, WILL BE USED TO INITIATE CONSTRUCTION ON WALKER BRANCH NUMBER 3 AND TO COMPLETE CONSTRUCTION ON THE WALKER BRANCH NUMBER 2 CONTRACT, RECREATION FACILITIES, AND SEWER LINES.

MERAMEC RIVER BASIN, VALLEY PARK LEVEE, MISSOURI

THE CITY OF VALLEY PARK, MISSOURI, IS LOCATED SOUTHWEST OF ST. LOUIS ALONG THE LEFT BANK OF THE MERAMEC RIVER. SINCE THE EARLY 1990'S, THE CITY HAS EXPERIENCED 11 MAJOR FLOODS, INCLUDING THE DECEMBER 1982 FLOOD OF RECORD. THIS FLOOD CAUSED DAMAGES ESTIMATED IN EXCESS OF $21 MILLION. THE MOST RECENT FLOODING OCCURRED IN SEPTEMBER AND AGAIN IN NOVEMBER 1993. THE $19.0 MILLION VALLEY PARK LEVEE PROJECT PROVIDES FOR 3.2 MILES OF LEVEE, THREE CLOSURE STRUCTURES, SIX GRAVITY DRAINS, AND THIRTY-THREE RELIEF WELLS.

PROGRAMMED UNOBLIGATED CARRYOVER INTO FISCAL YEAR 1996 WILL BE USED TO CONTINUE CONSTRUCTION OF THE LEVEE AND RELATED STRUCTURES AND TO INITIATE CONSTRUCTION OF RECREATION FACILITIES.

STE. GENEVIEVE, MISSOURI

THE STE. GENEVIEVE, MISSOURI, FLOOD CONTROL PROJECT IS ESTIMATED TO COST $53 MILLION. THE FIRST PHASE OF THE PROJECT, A LEVEE AND PUMP STATION TO PROTECT THIS HISTORIC TOWN FROM MISSISSIPPI RIVER FLOODING, IS ESTIMATED TO COST NEARLY $47 MILLION. OTHER PARTS OF THE PROJECT, CONSISTING OF IMPROVEMENTS ON TWO TRIBUTARY STREAMS AND RECREATION FACILITIES, ARE UNPROGRAMMED AT THIS TIME.

THE PROJECT RECEIVED INITIAL CONSTRUCTION FUNDING OF $3 MILLION IN FISCAL YEAR 1995; HOWEVER, EXECUTION OF THE PROJECT COOPERATION AGREEMENT AND ACQUISITION OF REAL ESTATE BY LOCAL INTERESTS ARE EXPECTED TO DELAY CONSTRUCTION INITIATION UNTIL JANUARY 1996. THEREFORE, CONSTRUCTION GENERAL FUNDS OF $3 MILLION ARE PROGRAMMED AS UNOBLIGATED CARRYOVER INTO FISCAL YEAR 1996. OF THE $3 MILLION, $1.3 MILLION WILL BE USED TO CONTINUE DESIGN AND TO INITIATE TWO CONSTRUCTION CONTRACTS IN FISCAL YEAR 1996. EXCESS FUNDS OF $1.7 MILLION WILL BE CARRIED INTO FISCAL YEAR 1997.

MISSISSIPPI RIVER, LOCK AND DAM 25, ILLINOIS AND MISSOURI

LOCK AND DAM 25 IS LOCATED NEAR WINFIELD, MISSOURI, 241.1 MILES ABOVE THE MOUTH OF THE OHIO RIVER. THE STRUCTURE HAS AGED BEYOND ITS DESIGN LIFE AND REHABILITATION TO CORRECT MAJOR PROBLEMS WAS INITIATED IN FISCAL YEAR 1994.

FISCAL YEAR 1996 FUNDS WILL BE USED TO INITIATE THREE CONTRACTS, INITIATE AND COMPLETE ONE CONTRACT, AND COMPLETE FIVE CONTRACTS.

OPERATION AND MAINTENANCE, GENERAL

OUR REQUEST FOR OPERATION AND MAINTENANCE, GENERAL, FUNDS FOR FISCAL YEAR 1996 IS $199.3 MILLION, $29.0 MILLION MORE THAN ALLOCATED

IN FISCAL YEAR 1995. REQUESTED FISCAL YEAR 1996 FUNDS WILL PROVIDE FOR CONTINUED OPERATION AND MAINTENANCE AT FORTY-FIVE COMPLETED PROJECTS.

NAVIGATION PROJECTS

OUR REQUEST INCLUDES $163.8 MILLION FOR NAVIGATION. THIS WILL ALLOW US TO MAINTAIN TWENTY-FIVE HARBOR AND CHANNEL PROJECTS AND EIGHT CANALIZED WATERWAYS. OF THE FUNDS REQUESTED, $101.0 MILLION OR 62 PERCENT IS FOR MAINTENANCE DREDGING.

FLOOD CONTROL PROJECTS

FLOOD CONTROL PROJECTS ACCOUNT FOR $15.8 MILLION OF OUR REQUEST. THE FUNDS REQUESTED WILL PROVIDE FOR OPERATION AND MAINTENANCE OF EIGHT FLOOD CONTROL RESERVOIR PROJECTS AND FOR CHANNEL IMPROVEMENTS AND INSPECTION OF COMPLETED WORKS.

MULTIPLE PURPOSE PROJECTS

WE OPERATE FOUR MULTIPLE PURPOSE PROJECTS WHICH ACCOUNT FOR $17.6 MILLION OF OUR REQUEST. BENEFITS OF THESE PROJECTS INCLUDE HYDROPOWER PRODUCTION.

PROTECTION OF NAVIGATION

OUR REQUEST INCLUDES $2.0 MILLION FOR PROTECTION OF NAVIGATION ON OUR WATERWAYS. INVOLVED ARE PROJECT CONDITION SURVEYS AND THE REMOVAL OF AQUATIC GROWTH.

MISSISSIPPI RIVER AND TRIBUTARIES PROGRAM

NOW I WILL DISCUSS THE MISSISSIPPI RIVER AND TRIBUTARIES PROGRAM. THE FISCAL YEAR 1996 MR&T BUDGET REQUEST IS FOR $357.4 MILLION BEFORE ASSIGNMENT OF SAVINGS AND SLIPPAGE. THERE IS NO PROGRAMMED UNOBLIGATED CARRYOVER INTO FISCAL YEAR 1996.

GENERAL INVESTIGATIONS

FUNDS IN THE AMOUNT OF $5.3 MILLION ARE REQUESTED UNDER THE GENERAL INVESTIGATIONS CATEGORY AND WILL PROVIDE FOR SIX ACTIVITIES. THESE INCLUDE CONTINUATION OF THREE FLOOD DAMAGE PREVENTION FEASIBILITY STUDIES, CONTINUATION OF TWO FLOOD CONTROL PRECONSTRUCTION ENGINEERING AND DESIGN EFFORTS AND THE COLLECTION AND STUDY OF BASIC DATA.

SURVEYS

MORGANZA, LOUISIANA, TO THE GULF OF MEXICO, LOUISIANA

ON THE MORGANZA, LOUISIANA, TO THE GULF OF MEXICO STUDY WE HAVE MOVED ALL ASPECTS OF THE STUDY RELATED TO THE ATCHAFALAYA RIVER TO THE REEVALUATION EFFORT WE HAVE UNDERWAY ON THE ATCHAFALAYA BASIN, LOUISIANA, CONSTRUCTION PROJECT. THIS IS APPROPRIATE BECAUSE OF THE DIRECT RELATIONSHIP OF PROBLEMS IN THE AREA TO THE ATCHAFALAYA RIVER.

CONSEQUENTLY, THE REMAINING STUDIES NOW TO BE PERFORMED FOCUS ON VARIOUS ALTERNATIVES FOR HURRICANE PROTECTION IN TERREBONNE PARISH.

RECONNAISSANCE PHASE COMPLETION AND CONTINUATION INTO THE FEASIBILITY PHASE ARE SCHEDULED FOR APRIL 1995. THE FUNDS REQUESTED FOR FISCAL YEAR 1996 WILL BE USED TO CONTINUE THE FEASIBILITY PHASE.

MISSISSIPPI DELTA, MISSISSIPPI

THE MISSISSIPPI DELTA, MISSISSIPPI, RECONNAISSANCE STUDY COMPLETED IN JUNE 1993 INDICATED THAT FLOOD CONTROL IMPROVEMENTS IN THE SUNFLOWER RIVER BASIN ARE FEASIBLE AND WOULD SIGNIFICANTLY REDUCE FLOOD DAMAGES IN THE BASIN. FUNDS AVAILABLE IN FISCAL YEAR 1995 AND REQUESTED FOR FISCAL YEAR 1996 WILL BE USED TO CONTINUE THE FEASIBILITY PHASE AT FULL FEDERAL EXPENSE. THE FEASIBILITY STUDY IS SCHEDULED FOR COMPLETION IN JULY 1997.

REELFOOT LAKE, TENNESSEE AND KENTUCKY

THE REELFOOT LAKE, TENNESSEE AND KENTUCKY, STUDY AREA IS LOCATED IN NORTHWEST TENNESSEE AND SOUTHWEST KENTUCKY. IN THE STUDY WE ARE INVESTIGATING THE NEED FOR IMPROVEMENTS FOR FLOOD CONTROL, SEDIMENTATION CONTROL, WATER QUALITY, WATER SUPPLY, FISH AND WILDLIFE RESTORATION, RECREATION AND REGIONAL DEVELOPMENT.

THE RECONNAISSANCE PHASE WAS COMPLETED IN DECEMBER 1994 AND WE CONTINUED INTO THE FEASIBILITY PHASE IN JANUARY 1995. FUNDS REQUESTED FOR FISCAL YEAR 1996 WILL BE USED TO CONTINUE THE FEASIBILITY PHASE.

PRECONSTRUCTION ENGINEERING AND DESIGN
EASTERN ARKANSAS REGION COMPREHENSIVE STUDY
(GRAND PRAIRIE AREA GENERAL REEVALUATION)

THE EASTERN ARKANSAS REGION COMPREHENSIVE STUDY IS A MULTIPURPOSE STUDY WITH PRIMARY EMPHASIS ON AGRICULTURAL WATER SUPPLY, CONSERVATION, AND FISH AND WILDLIFE ENHANCEMENT. THE MAJOR PROBLEM IDENTIFIED IS THE DEPLETION OF THE ALLUVIAL AQUIFER, WHICH PROVIDES ESSENTIALLY ALL THE WATER USED FOR AGRICULTURAL IRRIGATION.

THE PLAN IDENTIFIED IN THE DRAFT FEASIBILITY REPORT FOR THE GRAND PRAIRIE AREA WAS ESTIMATED TO COST $194 MILLION AND CONSISTS OF A MAJOR PUMPING STATION AND A NETWORK OF NEW AND IMPROVED CHANNELS WITH ASSOCIATED STRUCTURES THAT WOULD PROVIDE INTERBASIN TRANSFER OF SURFACE WATER TO THE WATER DEPLETED AREAS. INCLUDED AS AN INTEGRAL PART OF THE PLAN ARE CONSERVATION MEASURES, GROUNDWATER MANAGEMENT STRATEGIES, ON-FARM STORAGE RESERVOIRS AND FISH AND WILDLIFE MEASURES.

FUNDS AVAILABLE IN FISCAL YEAR 1995 AND REQUESTED FOR FISCAL YEAR 1996 WILL BE USED TO CONTINUE PRECONSTRUCTION ENGINEERING AND DESIGN. THE STUDIES FOR THE GRAND PRAIRIE AREA GENERAL REEVALUATION WILL BE COMPLETED AND A DRAFT REPORT WILL BE PREPARED IN MARCH 1997.

LOWER WHITE RIVER, ARKANSAS (BIG CREEK AND TRIBUTARIES)

THE LOWER WHITE RIVER, ARKANSAS, BIG CREEK AND TRIBUTARIES PRECONSTRUCTION ENGINEERING AND DESIGN PROJECT CONSISTS OF A GENERAL REEVALUATION STUDY INITIATED IN FISCAL YEAR 1988 AT THE REQUEST OF LOCAL INTERESTS. THE STUDY IS TO IDENTIFY A BALANCED PLAN OF IMPROVEMENT THAT WOULD PROVIDE FLOOD CONTROL FOR THE PROJECT AREA AND AVOID ADVERSE IMPACTS TO THE ENVIRONMENT.

RECENT STUDIES HAVE CONCENTRATED ON FINDING A FEASIBLE FLOOD CONTROL ALTERNATIVE FOR THE TOWN OF BRINKLEY, ARKANSAS, AND FOR THE AGRICULTURAL AREA ALONG LOWER BIG PINEY CREEK. AN EARTHEN LEVEE AND PUMPING STATION ALTERNATIVE TO RELIEVE FLOODING IN BRINKLEY IS FEASIBLE AND SUPPORTED BY LOCAL INTERESTS. A FLOOD CONTROL ALTERNATIVE FOR LOWER BIG PINEY CREEK COULD NOT BE FOUND THAT WAS BOTH ECONOMICALLY JUSTIFIED AND SUPPORTED BY LOCAL INTERESTS.

FUNDS AVAILABLE IN FISCAL YEAR 1995 WILL BE USED TO CONCLUDE THE BRINKLEY INVESTIGATION AND TO CONTINUE THE BASIN-WIDE REEVALUATION OF FLOODING CONSISTING OF AREAS ALONG THE MAIN STEM OF BIG CREEK. THE FUNDS REQUESTED FOR FISCAL YEAR 1996 WILL BE USED TO COMPLETE THE INVESTIGATION OF BASIN-WIDE FLOODING, PREPARE THE GENERAL REEVALUATION REPORT AND THE PROJECT MANAGEMENT PLAN. THE PRECONSTRUCTION ENGINEERING AND DESIGN PHASE IS SCHEDULED FOR COMPLETION IN SEPTEMBER 1997.

CONSTRUCTION

NEXT, I WILL DISCUSS THE MISSISSIPPI RIVER AND TRIBUTARIES CONSTRUCTION PROGRAM FOR WHICH $217.9 MILLION IS REQUESTED FOR FISCAL YEAR 1996, AN INCREASE OF $23.9 MILLION OVER THE AMOUNT ALLOCATED IN FISCAL YEAR 1995. THESE FUNDS WILL ALLOW US TO CONTINUE FOURTEEN CONSTRUCTION PROJECTS.

MISSISSIPPI RIVER LEVEES

THE MISSISSIPPI RIVER LEVEES PROJECT IS A COMPONENT OF THE MAIN STEM SYSTEM FOR THE CONTROL OF FLOODS ON THE MISSISSIPPI RIVER. THE LEVEE SYSTEM PROVIDES PROTECTION TO 23,620 SQUARE MILES AND PARTIAL PROTECTION TO AN ADDITIONAL 3,780 SQUARE MILES IN THE ALLUVIAL VALLEY SUBJECT TO FLOODING BY THE PROJECT FLOOD. THE VALUE OF LANDS AND IMPROVEMENTS PROTECTED BY AUTHORIZED WORKS AGAINST THE DESIGN FLOOD IS $120.9 BILLION IN 1994 DOLLARS.

AS PART OF THE MISSISSIPPI RIVER LEVEES PROJECT, HIGH PRIORITY CONTINUES TO BE PLACED ON UPGRADING THE LEVEES AND FLOODWALLS IN THE NEW ORLEANS METROPOLITAN AREA. TWO CONTRACTS ARE CURRENTLY UNDERWAY IN THIS AREA, THE NAVAL RESERVATION LEVEE ENLARGEMENT AND THE GRETNA PHASE II B LEVEE ENLARGEMENT AND FLOODWALL BOTH ON THE WEST BANK. THE GRETNA CONTRACT WILL BE COMPLETED IN FISCAL YEAR 1995 AND THE NAVAL RESERVATION CONTRACT IN FISCAL YEAR 1966.

WORK CONTINUES TO RAISE LEVEES IN NORTHERN LOUISIANA HAVING THE MOST SEVERE GRADE DEFICIENCIES. IN THIS AREA, FROM OPPOSITE NATCHEZ, MISSISSIPPI, NORTH TO THE LOUISIANA-ARKANSAS STATE LINE, LEVEES ARE FROM 2 TO 9 FEET DEFICIENT IN GRADE. ONE CONTRACT FOR RAISING THE LEVEE IN THIS AREA IS UNDERWAY AND ONE MORE IS SCHEDULED FOR INITIATION IN FISCAL YEAR 1995. WITH FISCAL YEAR 1996 FUNDS REQUESTED, WE WILL CONTINUE THE TWO FISCAL YEAR 1995 ITEMS AND INITIATE TWO NEW ITEMS IN THE DEFICIENCY AREA.

A CONTRACT FOR EXTENDING THE TIPTONVILLE, TENNESSEE, LEVEE IS SCHEDULED FOR AWARD IN JUNE 1995. THIS CONTRACT, WHEN COMPLETED WILL PROVIDE FLOOD PROTECTION TO ABOUT 150 STRUCTURES IN NORTH TIPTONVILLE, TENNESSEE, AND ABOUT 1,700 ACRES OF RESIDENTIAL AND AGRICULTURAL LANDS.

IN TERMS OF THE TOTAL MISSISSIPPI RIVER LEVEES PROGRAM, FISCAL YEAR 1996 FUNDS HAVE BEEN REQUESTED TO INITIATE FOURTEEN LEVEE CONTRACT ITEMS, INITIATE AND COMPLETE TWO ITEMS, CONTINUE THIRTEEN ITEMS, AND COMPLETE TWO ITEMS.

CHANNEL IMPROVEMENT

UNDER THE CHANNEL IMPROVEMENT PROJECT, ANOTHER COMPONENT OF THE MAIN STEM SYSTEM, ABOUT 1,010 MILES OF THE 1,085 MILES OF AUTHORIZED BANK PROTECTION HAVE BEEN COMPLETED. WE PLAN TO PLACE 11.5 MILES OF REVETMENTS DURING 1995. FISCAL YEAR 1996 FUNDS HAVE BEEN REQUESTED TO PLACE 5.7 MILES OF REVETMENTS.

FOR MANY YEARS THIS WORK HAS BEEN ACCOMPLISHED WITH TWO REVETMENT PLANTS, ONE IN MEMPHIS, TENNESSEE, AND ONE IN VICKSBURG, MISSISSIPPI. WE REALIZED SEVERAL YEARS AGO, HOWEVER, THAT THE NEED FOR TWO SEPARATE REVETMENT OPERATIONS WAS DIMINISHING AS THE REVETMENT CONSTRUCTION PROGRAM NEARS COMPLETION AND THE ANNUAL PROGRAM DECREASES. WE BEGAN PLANNING FOR THE INEVITABLE CONSOLIDATION OF OPERATIONS.

MANPOWER REDUCTIONS THROUGH VOLUNTARY SEPARATIONS IN LATE 1993 AND EARLY 1994 ALLOWED A CONSOLIDATION EARLIER THAN PLANNED WITHOUT ANY ADVERSE IMPACT TO ANY PERMANENT EMPLOYEES. THE CONSOLIDATION WAS SUCCESSFULLY ACCOMPLISHED WITH VICKSBURG AND MEMPHIS DISTRICTS EACH RETAINING A PORTION OF THE REVETMENT CONSTRUCTION MISSION. THE 1994 REVETMENT CONSTRUCTION SEASON WAS ACCOMPLISHED WITH THE CONSOLIDATED PLANT BEGINNING ON 1 AUGUST AND COMPLETING ON 10 NOVEMBER. VERY FEW PROBLEMS WERE ENCOUNTERED, AND PRELIMINARY ANALYSES INDICATE A COST SAVINGS OF APPROXIMATELY $8.6 MILLION WAS ACHIEVED OVER THE PREVIOUS TWO-PLANT OPERATION.

ATCHAFALAYA BASIN, LOUISIANA

OF THE 449 MILES OF LEVEES IN THE ATCHAFALAYA BASIN PROJECT, WE WILL HAVE COMPLETED OR HAVE UNDER CONSTRUCTION 367 MILES THROUGH FISCAL YEAR 1995. WITH THE FISCAL YEAR 1996 BUDGET REQUEST, WE WILL INITIATE TWO LEVEE ENLARGEMENTS, INITIATE AND COMPLETE ONE LEVEE ENLARGEMENT AND THREE REVETMENT ITEMS, CONTINUE REVETMENT STONE BANK PAVING, AND COMPLETE TWO LEVEE ENLARGEMENTS.

WE HAVE ALSO INITIATED A REEVALUATION STUDY OF THE LOWER ATCHAFALAYA RIVER AND SURROUNDING AREA UNDER THE ATCHAFALAYA BASIN

PROJECT. IN RECENT YEARS EXCESSIVELY HIGH ATCHAFALAYA RIVER STAGES DURING PERIODS OF LOW TO NORMAL FLOWS HAVE CAUSED FLOODING OF RIVER FRONT BUSINESSES IN MORGAN CITY AND BERWICK, LOUISIANA, CAUSING A PUBLIC OUTCRY FOR PROJECT REEVALUATION. THE REEVALUATION WILL INVESTIGATE POSSIBLE CHANGES TO THE EXISTING PROJECT THAT MAY FACILITATE IMPROVEMENTS TO THE ENVIRONMENT, FLOOD CONTROL, AND OPERATION AND MAINTENANCE OF THE PROJECT TO INCLUDE SEVERAL ALTERNATIVES WITH THE AIM OF POSSIBLY REDUCING THE VOLUME OF FLOOD WATERS PASSING MORGAN CITY AND BERWICK, LOUISIANA, FOR FLOWS SMALLER THAN PROJECT FLOOD FLOWS. THIS REEVALUATION WAS INITIATED IN JULY 1994 AND WILL TAKE ABOUT FIVE YEARS TO COMPLETE. DUE TO THE UNIQUE RIVERINE AND COASTAL NATURE OF THE AREA AND THE WIDE AND DIVERSE INTEREST IN THE REEVALUATION, WE ARE EMPLOYING AN INTENSIVE PUBLIC INVOLVEMENT PROGRAM THROUGHOUT THE REEVALUATION EFFORT.

ATCHAFALAYA BASIN FLOODWAY SYSTEM, LOUISIANA

ON THE ATCHAFALAYA BASIN FLOODWAY SYSTEM PROJECT, PROGRAMMED WORK PROVIDES FOR ACQUISITION OF 50,000 ACRES IN FEE FOR PUBLIC ACCESS AND EASEMENTS ON 365,000 ACRES FOR FLOWAGE, DEVELOPMENTAL CONTROL AND ENVIRONMENTAL PROTECTION. APPROXIMATELY 16,000 ACRES OF FEE LAND AND 16,000 ACRES OF EASEMENTS HAVE BEEN ACQUIRED.

FUNDS REQUESTED FOR FISCAL YEAR 1996 WILL BE USED TO CONTINUE FEE AND EASEMENT LAND ACQUISITION AND DESIGN WORK ON THE MANAGEMENT UNITS AND TO INITIATE PLANNING, ENGINEERING AND DESIGN ON THE RECREATION UNIT TO DETERMINE IF CONSTRUCTION OF THIS UNIT IS APPROPRIATE AT THIS TIME.

EIGHT MILE CREEK, ARKANSAS

THE EIGHT MILE CREEK, ARKANSAS, PROJECT INCLUDES CHANNEL IMPROVEMENTS TO PROVIDE 100-YEAR FLOOD PROTECTION TO THE URBAN AREA OF PARAGOULD, ARKANSAS, AND MAINTAIN CURRENT 3-YEAR PROTECTION LEVELS IN THE DOWNSTREAM RURAL AREA.

THE PROJECT COST-SHARING AGREEMENT WITH THE CITY OF PARAGOULD IS SCHEDULED FOR EXECUTION IN OCTOBER 1995. THE FUNDS REQUESTED FOR FY 1996 WILL BE USED TO INITIATE CONSTRUCTION.

ST. FRANCIS BASIN, ARKANSAS AND MISSOURI

THE ST. FRANCIS BASIN PROJECT WILL PROVIDE PROTECTION AGAINST HEADWATER FLOODS OF THE ST. FRANCIS AND LITTLE RIVERS TO AN AREA OF OVER 1.4 MILLION ACRES AND AGAINST BACKWATER FLOODS OF THE MISSISSIPPI RIVER TO AN AREA OF OVER 500,000 ACRES. THE FUNDS AVAILABLE IN FISCAL YEAR 1995 ARE BEING USED FOR RELOCATION WORK ON TEN COUNTY BRIDGES, SIX STATE BRIDGES, FIVE COUNTY ROADS AND CONSTRUCTION OF SEVEN CHANNEL IMPROVEMENT ITEMS COVERING ABOUT 31 MILES OF CHANNEL. THE FUNDS REQUESTED FOR FISCAL YEAR 1996 WILL PERMIT RELOCATION WORK ON FIVE COUNTY ROADS, THREE STATE BRIDGES, AND ONE RAILROAD BRIDGE; AND CONSTRUCTION ON FOUR CHANNEL IMPROVEMENT ITEMS COVERING ABOUT 28 MILES OF CHANNELS. APPROXIMATELY 200 ACRES OF MITIGATION LANDS IN MISSOURI WILL ALSO BE ACQUIRED. THE PROJECT IS ABOUT 89 PERCENT COMPLETE.

TENSAS BASIN, ARKANSAS AND LOUISIANA

ALL CURRENT ACTIVITIES ON THE TENSAS BASIN PROJECT ARE ON THE SICILY ISLAND AREA PORTION OF THE RED RIVER BACKWATER AREA PROJECT UNIT. THE SICILY ISLAND AREA CONSISTS OF ABOUT 100,000 ACRES OF LAND AND RURAL DEVELOPMENT IN CATAHOULA AND FRANKLIN PARISHES IN EAST CENTRAL LOUISIANA.

THIS AREA IS SUBJECT TO FREQUENT FLOODING CAUSED BY BACKWATER FROM THE MISSISSIPPI AND RED RIVERS AND FLOODS FROM THE OUACHITA AND TENSAS RIVERS. THE 1-YEAR FREQUENCY FLOOD IN THE AREA WOULD INUNDATE APPROXIMATELY 13,000 ACRES AND THE 10-YEAR FLOOD WOULD INUNDATE APPROXIMATELY 56,000 ACRES. THE PROJECT WILL PROVIDE 10-YEAR PROTECTION TO THE SICILY ISLAND AREA.

THE FUNDS REQUESTED FOR FISCAL YEAR 1996 WILL BE USED TO INITIATE TWO LEVEE ITEMS, INITIATE AND COMPLETE THE UTILITY RELOCATIONS FOR THESE ITEMS, AND COMPLETE TWO LEVEE ITEMS AND THE FOOL RIVER LEVEE AND PUMPING PLANT.

WHITEMAN'S CREEK, ARKANSAS

THE WHITEMAN'S CREEK, ARKANSAS, PROJECT IS LOCATED IN CRAIGHEAD COUNTY, ARKANSAS, APPROXIMATELY 50 MILES NORTHWEST OF MEMPHIS, TENNESSEE. THE PLAN OF IMPROVEMENT PROVIDES FOR 6.1 MILES OF CHANNEL IMPROVEMENTS FOR JONESBORO, ARKANSAS, ON HIGGENBOTTOM CREEK, MOORE'S DITCH, TURTLE CREEK AND WHITEMAN'S CREEK. THE PROJECT WILL PROVIDE APPROXIMATELY 25-YEAR PROTECTION ALONG HIGGINBOTTOM CREEK AND 10-YEAR PROTECTION ALONG MOORE'S DITCH, TURTLE CREEK AND WHITEMAN'S CREEK.

THE PROJECT COOPERATION AGREEMENT IS SCHEDULED FOR EXECUTION IN MAY 1995. FUNDS REQUESTED FOR FISCAL YEAR 1996 WILL BE USED TO INITIATE CONSTRUCTION ON TURTLE AND WHITEMAN'S CREEKS AND CONTINUE WORK ON HIGGINBOTTOM CREEK.

MISSISSIPPI DELTA REGION, LOUISIANA

THE MISSISSIPPI DELTA REGION, LOUISIANA, PROJECT CONSISTS OF FOUR SALINITY CONTROL STRUCTURES DESIGNED TO DIVERT FRESHWATER FROM THE MISSISSIPPI RIVER INTO COASTAL BAYS AND MARSHES FOR FISH AND WILDLIFE RESTORATION.

THE COMPLETED CAERNARVON STRUCTURE ON THE EAST BANK OF THE MISSISSIPPI RIVER HAS BEEN OPERATED AS NEEDED SINCE AUGUST 1991. THE DIVERSION IS PRESERVING ABOUT 16,000 ACRES OF WETLANDS. THE FUNDS AVAILABLE IN FISCAL YEAR 1995 WILL PROVIDE FOR THE COMPLETION OF THE BIOLOGICAL MONITORING PROGRAM TO DETERMINE IMPACTS OF THE FRESHWATER DIVERSION TO THE ENVIRONMENT AND FISH AND WILDLIFE.

THE BUDGET REQUEST INCLUDES FUNDS TO INITIATE CONSTRUCTION OF THE DAVIS POND DIVERSION STRUCTURE, PUMPING STATION AND LEVEES. THE DAVIS POND DIVERSION STRUCTURE, WHEN COMPLETED, WILL PRESERVE AN ESTIMATED 83,000 ACRES OF WETLANDS.

MISSISSIPPI AND LOUISIANA ESTUARINE AREAS, MISSISSIPPI AND LOUISIANA

THE MISSISSIPPI AND LOUISIANA ESTUARINE AREAS PROJECT WILL PROVIDE MEANS TO DIVERT WATER FROM THE MISSISSIPPI RIVER TO THE LAKE PONTCHARTRAIN BASIN AND MISSISSIPPI SOUND. FOR THE PAST SEVERAL MONTHS THIS PROJECT HAS BEEN UNDERGOING AN EXTENSIVE REANALYSIS BY FEDERAL, STATE AND ENVIRONMENTAL INTERESTS, WITH ADDITIONAL ACADEMIC INPUT FROM LOUISIANA STATE UNIVERSITY, UNIVERSITY OF SOUTHWESTERN LOUISIANA, AND NICHOLLS STATE UNIVERSITY PROFESSORS. CRITICAL AREAS OF FISHERIES IMPACT, CIRCULATION AND WATER QUALITY, NUTRIENT IMPACT ANALYSIS AND OVERLAND FLOW FEASIBILITY WERE EXAMINED AND SUBSEQUENT RECOMMENDATIONS DEVELOPED. WE ARE CURRENTLY EVALUATING THE MOST SIGNIFICANT PROPOSALS OF REDUCING THE MAXIMUM FLOW AND PLACING AS MUCH OF THE DIVERSION AS PRACTICAL OVER WETLANDS. THE RESULTS OF THIS EVALUATION SHOULD BE AVAILABLE IN MARCH 1995.

DEPENDING ON THE RESULTS OF THE EVALUATION, CONSTRUCTION COULD BE DELAYED UNTIL FISCAL YEAR 1996 AND WOULD BE INITIATED WITH NON-FEDERAL FUNDS. ACCORDINGLY, THE PROJECT COOPERATION AGREEMENT IS SCHEDULED FOR EXECUTION IN JULY 1995 AND WE ARE REQUESTING FEDERAL FUNDS FOR FISCAL YEAR 1996 TO CONTINUE THE PREPARATION OF PLANS AND SPECIFICATIONS.

YAZOO BASIN, MISSISSIPPI

ON THE YAZOO BASIN PROJECT, WORK ON THE REFORMULATION STUDY IS CONTINUING. THIS STUDY INVOLVES FOUR PORTIONS OF THE YAZOO BASIN PROJECT AND IS ESTIMATED TO COST $32.4 MILLION. BASED ON RESULTS OF COMPLETED REFORMULATIONS FOR THE UPPER STEELE BAYOU AND UPPER YAZOO PROJECTS PORTIONS, THE REFORMULATION EFFORT HAS, TO DATE, BEEN COMPLETELY SUCCESSFUL IN THAT PROJECT COSTS HAVE BEEN REDUCED BY $75.0 MILLION, ENVIRONMENTAL IMPACTS HAVE BEEN REDUCED, AND ENVIRONMENTAL AND LOCAL INTERESTS ARE SATISFIED. IN FISCAL YEAR 1995 WE WILL CONTINUE THE BACKWATER AREA PORTION WHICH WAS INITIATED IN JULY 1993 AND THE HEADWATER TRIBUTARIES PORTION WHICH WAS INITIATED IN OCTOBER 1994. THE FUNDS REQUESTED FOR FISCAL YEAR 1996 WILL BE USED TO CONTINUE BOTH OF THESE PORTIONS OF THE STUDY.

THE FUNDS REQUESTED FOR FISCAL YEAR 1996 FOR THE DEMONSTRATION EROSION CONTROL PROGRAM WILL PROVIDE FOR INITIATION OF FIVE CONTRACTS AND CONTINUATION OF TWENTY FOUR CONTRACTS FOR BANK STABILIZATION, CHANNEL IMPROVEMENTS, MAJOR AND MINOR GRADE CONTROL STRUCTURES AND LEVEE CONSTRUCTION.

A CONTRACT FOR THE REMOVAL OF THE OLD STEEL SPAN BRIDGE LOCATED ON THE YAZOO RIVER AT MILE 117 AT BELZONI, MISSISSIPPI, AND THREATENING THE EXISTING FLOOD PROTECTION WORKS ON THE RIVER IS SCHEDULED FOR AWARD IN JULY 1995.

HORN LAKE CREEK AND TRIBUTARIES, INCLUDING COW PEN CREEK, TENNESSEE AND MISSISSIPPI

THE HORN LAKE CREEK PROJECT WILL REDUCE FLOODING OF URBAN AREAS IN HORN LAKE AND SOUTHHAVEN, MISSISSIPPI, AS WELL AS AGRICULTURAL LAND

ALONG COW PEN AND HORN LAKE CREEKS. THE FUNDS REQUESTED FOR FISCAL YEAR 1996 WILL BE USED TO COMPLETE THE PROJECT IN DECEMBER 1995.

NONCONNAH CREEK, TENNESSEE AND MISSISSIPPI

THE NONCONNAH CREEK PROJECT IS LOCATED WITHIN THE MEMPHIS, TENNESSEE, METROPOLITAN AREA. FISCAL YEAR 1995 FUNDS ARE BEING USED TO CONTINUE PLANNING, ENGINEERING AND DESIGN WHILE THE CITY OF MEMPHIS RELOCATES THE U.S. HIGHWAY 51 BRIDGE. THE BRIDGE MUST BE RELOCATED BEFORE FEDERAL CONSTRUCTION ON THE PROJECT CAN CONTINUE. FUNDS REQUESTED FOR FISCAL YEAR 1996 WILL BE USED TO INITIATE CONSTRUCTION OF CHANNEL ITEM 1 FROM MILE 0 TO MILE 6.2. FLOOD CONTROL IMPROVEMENTS ARE SCHEDULED FOR COMPLETION IN SEPTEMBER 1997.

WEST TENNESSEE TRIBUTARIES, TENNESSEE

THE WEST TENNESSEE TRIBUTARIES PROJECT IS LOCATED ON THE OBION AND FORKED DEER RIVERS AND THEIR MAJOR TRIBUTARIES. NINETY MILES OF THE AUTHORIZED 225 MILES OF CHANNEL ENLARGEMENT HAVE BEEN COMPLETED, AND APPROXIMATELY 13,527 ACRES OF THE AUTHORIZED 32,000 ACRES OF THE MITIGATION LANDS HAVE BEEN ACQUIRED. THE STATE OF TENNESSEE IS THE PROJECT SPONSOR.

CONSTRUCTION OF THE REMAINDER OF THE PROJECT CANNOT BE PERFORMED DUE TO THE DENIAL OF WATER QUALITY CERTIFICATION BY THE STATE. ACCORDINGLY, WE ARE ASSURING THAT THE CHANNELS ALONG BRIDGE AND UTILITY CROSSINGS IN THE UNCOMPLETED PORTION OF THE PROJECT ARE PROTECTED FROM EFFECTS OF THE COMPLETED CHANNEL WORK.

FUNDS REQUESTED FOR FISCAL YEAR 1996 WILL BE USED TO INITIATE CONSTRUCTION OF TWO CHANNEL PROTECTION ITEMS, CONTINUE THE CONSTRUCTION OF TWO ITEMS, AND COMPLETE ONE ITEM. THIS WORK IS NECESSARY FOR ADEQUATE PROTECTION OF THREE PIPELINE CROSSINGS AND SEVEN BRIDGES; AND FOR CHANNEL PROTECTION AND GRADE CONTROL STRUCTURES ALONG SEVEN TRIBUTARIES OF THE MAIN CHANNEL.

THE STATE OF TENNESSEE HAS PROVIDED TO THE CORPS ITS PLAN FOR THE REFORMULATION OF THE WEST TENNESSEE TRIBUTARIES PROJECT. IN AUGUST 1994, WE INITIATED A LIMITED REEVALUATION OF TWO SMALL DEMONSTRATION PROJECTS ON STOKER CREEK AND THE MIDDLE FORK FORKED DEER RIVER, INCLUDING BUCK CREEK, PROPOSED BY THE STATE IN THEIR PLAN KNOWN AS THE "MISSION PLAN." THE PURPOSE OF THE REEVALUATION IS TO DETERMINE PROJECT FEASIBILITY AND FEDERAL INTEREST AND TO DETERMINE IF A REFORMULATION OF THE ENTIRE BASIN WITH APPLICATION OF THE "MISSION PLAN" PRINCIPLES IS WARRANTED. THE DRAFT REEVALUATION REPORT IS SCHEDULED FOR SUBMISSION TO THE MISSISSIPPI RIVER COMMISSION IN JANUARY 1996. A REFORMULATED PROJECT COULD POTENTIALLY SATISFY THE CONCERNS OF BOTH FLOOD CONTROL AND ENVIRONMENTAL INTERESTS IN THE AREA WHO HAVE LONG BEEN AT ODDS.

MAINTENANCE

OUR FISCAL YEAR 1996 REQUEST FOR MISSISSIPPI RIVER AND TRIBUTARIES MAINTENANCE IS $134.2 MILLION WHICH IS $8.0 MILLION MORE THAN ALLOCATED IN FISCAL YEAR 1995. THIS REQUEST WILL ALLOW

CONTINUATION OF NECESSARY OPERATIONS AND MAINTENANCE ACTIVITIES ON THIRTY-THREE COMPLETED PROJECTS. OF THE $134.2 MILLION REQUEST, $88.9 MILLION, OR 66 PERCENT, WILL BE USED FOR OPERATION AND MAINTENANCE OF MAIN STEM LEVEES, CHANNELS, AND HARBORS. THIS WORK CONSISTS OF MISSISSIPPI RIVER MAIN STEM CHANNEL AND HARBOR DREDGING, REPAIRS OF LEVEE SLIDES, BANKS, DIKES AND REVETMENTS. ANOTHER $42.9 MILLION, OR 32 PERCENT, IS FOR OPERATION AND MAINTENANCE OF TRIBUTARY RIVER BASIN PROJECTS AND THE REMAINING $2.4 MILLION, OR 2 PERCENT, IS FOR MAPPING AND INSPECTION OF COMPLETED WORKS.

FUNDS AVAILABLE IN FISCAL YEAR 1995 ARE BEING USED FOR OPERATION OF PROJECTS AND REPAIRS OF LEVEE SLIDES, REPAIRS TO REVETMENTS AND DIKES, HARBOR DREDGING, AND DREDGING OF THE MISSISSIPPI RIVER.

COASTAL WETLANDS PLANNING, PROTECTION, AND RESTORATION ACT

IN CONCLUDING THIS REPORT, I WOULD LIKE TO COVER THE STATUS OF A PROGRAM WE ARE INVOLVED IN AS PART OF A JOINT EFFORT BETWEEN THE STATE OF LOUISIANA AND FOUR OTHER FEDERAL AGENCIES TO ADDRESS THE CRITICAL LOSS OF COASTAL WETLANDS IN LOUISIANA. UNDER AUTHORITY OF THE COASTAL WETLANDS PLANNING, PROTECTION, AND RESTORATION ACT, THE LOUISIANA COASTAL WETLAND CONSERVATION AND RESTORATION TASK FORCE COMPLETED THE LOUISIANA COASTAL WETLANDS RESTORATION PLAN IN JANUARY 1994. THE RECORD OF DECISION WAS SIGNED ON MARCH 18, 1994. THE REPORT IS CURRENTLY AT THE OFFICE OF MANAGEMENT AND BUDGET AWAITING TRANSMITTAL TO THE CONGRESS.

THE TASK FORCE HAS ALSO COMPLETED FOUR PRIORITY PROJECT LISTS OF COASTAL WETLANDS RESTORATION PROJECTS. THE FOURTH LIST WAS COMPLETED IN DECEMBER 1994 AND WAS SCHEDULED FOR SUBMISSION TO CONGRESS EARLY IN 1995.

OF THE FORTY-SIX PROJECTS ON THE FIRST THREE LISTS, NINE WERE IDENTIFIED AS CORPS PROJECTS. WE HAVE COMPLETED CONSTRUCTION OF ONE PROJECT AND WILL INITIATE CONSTRUCTION OF FIVE PROJECTS IN FISCAL YEAR 1995 AND THREE PROJECTS IN FISCAL YEAR 1996. SCHEDULES FOR THE SEVENTEEN PROJECTS INCLUDED ON THE FOURTH LIST ARE BEING DEVELOPED.

[CLERK'S NOTE.—The justification sheets for the Lower Mississippi Valley Division follow:]

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LOWER MISSISSIPPI VALLEY DIVISION

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SUMMARY LOWER MISSISSIPPI VALLEY DIVISION

	FY 1995 Allocation	FY 1996 Request	Increase or Decrease
General Investigations			
Survey	$ 8,020,000	$ 2,341,000[1]	$ -5,679,000
Preconstruction Engineering and Design	2,724,000	2,410,000[2]	-314,000
Construction, General			
Construction	99,871,000[3]	54,500,000[4]	-45,371,000
Operation and Maintenance, General			
Project Operation and Maintenance	170,272,000	199,273,000	+29,001,000
TOTAL	$ 280,887,000	$ 258,524,000	$ -22,363,000

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[1] Excludes $1,711,000 in programmed carryover from prior years that is being programmed for use in FY 1996.

[2] Excludes $364,000 in programmed carryover from prior years that is being programmed for use in FY 1996.

[3] Includes $1,599,000 allocated from Inland Waterway Trust Fund.

[4] Includes $3,150,000 to be derived from the Inland Waterway Trust Fund. Excludes $26,268,000 in unobligated carryover from prior years that is being programmed for use in FY 1996.

Study	Total Estimated Federal Cost $	Allocation Prior to FY 1995 $	Allocation FY 1995 $	Tentative Allocation FY 1996 $	Additional to Complete After FY 1996 $
1. SURVEYS - NEW					
a. Navigation Studies: None.					
b. Flood Damage Prevention Studies:					
Arkansas					
McKinney Bayou	500,000	0	0	450,000	50,000

The McKinney Bayou, Arkansas, study will address the current need and feasibility of providing additional flood protection to urban and agricultural areas within the McKinney Bayou area. The study area is located in southwestern Arkansas in the vicinity of Texarkana, Arkansas and Texas. The McKinney Bayou area is a crescent-shaped watershed located adjacent to the Red River. The study area contains a total of 340 square miles, 66 percent of which is alluvial lands and 34 percent hilly uplands. Flood control measures for McKinney Bayou were first authorized by the Flood Control Act of 3 August 1955. The project features have been completed and include channel improvements and levee construction with appurtenant drainage works along McKinney Bayou. The Water Resources Development Act of 1976 authorized construction of a state line diversion, a diversion at Buzzard Bluff, improvement of McKinney Bayou channel, and land acquisition for mitigation. A reevaluation of authorized features of the McKinney Bayou project was completed in 1983. The reevaluation study indicated that the improvement of McKinney Bayou channel was economically feasible, but due to a lack of local support at that time, the project was reclassified to an inactive category. Average annual damages were estimated at $365,000. Future damages were projected to exceed $500,000 annually without the project. Some flooding continues to occur every 1 to 2 years and the 100-year flood is estimated to inundate approximately 50,000 cleared acres. The most recent major flood occurred in March/April 1989. This flood, approximately a 100-year event, overtopped the Federally constructed levee system resulting in an estimated $2 million in damages. The local project sponsor now desires and supports a comprehensive review of the area's water resource problems and needs to include a review of currently authorized features as well as other possible alternatives. The Miller County Improvement and Drainage District understands study/project cost-sharing requirements and has indicated a willingness to serve as the project sponsor. Their support for the study was initially expressed by letter 16 November 1992 and reaffirmed by letter 4 August 1994. This study and its anticipated outputs, flood control, are in accordance with Administration policy and will fully address any environmental needs. The reconnaissance study is scheduled for completion in September 1996 which is 12 months after initiating the study.

c. Shoreline Protection Studies: None.

d. Special Studies: None.

e. Comprehensive Studies: None.

f. Project Review Studies: None.

Study	Total Estimated Federal Cost $	Allocation Prior to FY 1995 $	Allocation FY 1995 $	Tentative Allocation FY 1996 $	Additional to Complete After FY 1996 $
2. SURVEYS - CONTINUING					
a. Navigation Studies:					
Louisiana					
Intracoastal Waterway Locks	4,796,000	1,628,000	217,000	500,000	2,451,000

The study area is located in southern Louisiana between the Mississippi River and the Sabine River on the Louisiana-Texas border. This study was previously budgeted under the title of Algiers Lock, Louisiana. Algiers Lock is the most congested of the seven locks on the Gulf Intracoastal Waterway system west of the Mississippi River. Other locks with significant delays include Calcasieu Lock on the main stem of the Gulf Intracoastal Waterway and Port Allen and Bayou Sorrel Locks on the Gulf Intracoastal Waterway, Morgan City to Port Allen alternate route. All of the locks are structurally sound. Delays occur due to their restrictive dimensions. The locks, their 1993 tonnages, and average delays are as follows: Algiers, 18.3 million tons, 8.8 hours; Bayou Sorrel, 26.0 million tons, 3.8 hours; Calcasieu, 43.8 million tons, .7 hours; and Port Allen, 26.9 million tons, 2.0 hours. Tonnages are projected to increase, resulting in an increase in average delays. The purpose of this system study is to determine the feasibility of replacing these locks or constructing additional locks (based on a comprehensive system analysis procedure), with consideration given to the timing for each of the locks and the appropriate size of the lock replacement or addition. Constructing a larger lock replacement or an additional lock would increase the capacity of the structure(s) to deal with the projected increases in traffic levels. The locks are all features of the Gulf Intracoastal Waterway project which is listed in Section 206 of Public Law 95-502 as an inland waterway. This study is an interim study under the authority of the Gulf Intracoastal Waterway, Louisiana-Texas study. The results of the reconnaissance study indicate that there are immediate needs for capacity increases at Bayou Sorrel and Calcasieu Locks. The results of the study also indicate that there are future needs for capacity increases at Port Allen Lock and possibly Algiers Lock. The study will address the feasibility of a lock replacement at Bayou Sorrel Lock only, which has an immediate need for replacement for navigation and flood control purposes. This study and its anticipated outputs are in accord with Administration policy.

The reconnaissance phase is scheduled for completion in May 1995. Fiscal Year 1995 funds are being used to continue into the feasibility phase of the study.

Fiscal Year 1996 funds will be used to continue the feasibility phase of the study. The feasibility phase study will be conducted at full Federal expense. The preliminary estimated cost of the feasibility phase is $3,800,000. A completion date is being determined for this feasibility study.

Study	Total Estimated Federal Cost $	Allocation Prior to FY 1995 $	Allocation FY 1995 $	Tentative Allocation FY 1996 $	Additional to Complete After FY 1996 $
Lake Charles Ship Channel, By-Pass Channel and General Anchorage Area	1,660,000	218,000	335,000[1]	47,000	1,060,000

The study area is located in Calcasieu and Cameron Parishes in southwest Louisiana. It includes the portion of the Calcasieu River in the vicinity of the City of Lake Charles. Calcasieu Parish has a population of 168,134 (1990 census), and Cameron Parish, the most sparsely populated in the state, has a population of 9,260. The City of Lake Charles, with 70,580 inhabitants, is the largest population center in the study area and is the site of the river's major port. The existing Calcasieu River and Pass project, authorized by the River and Harbor Act of 14 July 1960, provides for a project depth of 40 feet over a bottom width of 400 feet from the Gulf of Mexico (mile 0) to the Port of Lake Charles (mile 34.1) and then a depth of 35 feet over a bottom width of 250 feet to mile 36.0. The Port of Lake Charles consistently ranks among the top 20 U.S. ports in total tonnage. In 1991, the port was ranked 15th in total tonnage and 12th in foreign tonnage among U.S. ports. Crude petroleum and petroleum products accounted for over half its tonnage in recent years. Agricultural products are also an important commodity. Total tonnages shipped on the Calcasieu River for the past 5 years are as follows: 1992 (last year available)--44,039,000; 1991--41,237,000; 1990--40,883,000; 1989--40,813,000; and 1988--37,312,000. Recent increases in traffic levels and a higher safety awareness have renewed interest in navigation constrictions on the 36-mile channel. One-way traffic conditions (due to a narrow channel and a lack of general anchorages) have resulted in significant delays for large ships. As a result of the increased safety awareness, ships are no longer allowed to anchor in the channel's turning basins. Consequently, inbound vessels must wait in the Gulf of Mexico until outbound vessels transit the channel. The narrow channel and lack of anchorages work together to compound delays. Traffic restrictions imposed during the passage of liquefied natural gas carriers also compound delays. The Lake Charles Harbor and Terminal District, the Lake Charles Pilots, and various private navigation interests support a proposal to reduce transportation delays by constructing a deep-draft by-pass channel and anchorage area. The Lake Charles Harbor and Terminal District has expressed intent to be the local non-Federal sponsor for this project should one result from the reconnaissance phase.

Fiscal Year 1995 funds are being used to continue the reconnaissance phase at full Federal expense. Fiscal Year 1996 funds will be used to complete the reconnaissance phase and continue into the feasibility phase of the study if the reconnaissance report is certified to be in accord with policy. The preliminary estimated cost of the feasibility phase is $2,520,000, which is to be shared on a 50-50 percent basis by Federal and non-Federal interests. Up to one-half of the non-Federal share may be in-kind services. A summary of study cost sharing is as follows:

Total Estimated Study Cost	$2,920,000
Reconnaissance Phase (Federal)	400,000
Feasibility Phase (Federal)	1,260,000
Feasibility Phase (Non-Federal)	1,260,000

The reconnaissance phase is scheduled for completion in October 1995. A completion date is being determined for this feasibility study.

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[1] $173,000 of the amount available for FY 1995 is scheduled as programmed carryover into FY 1996.

APPROPRIATION TITLE: General Investigations, Fiscal Year 1996 Lower Mississippi Valley Division

Study	Total Estimated Federal Cost $	Allocation Prior to FY 1995 $	Allocation FY 1995 $	Tentative Allocation FY 1996 $	Additional to Complete After FY 1996 $
Mississippi River-Gulf Outlet Bank Erosion	1,625,000	295,000	370,000[1]	25,000	935,000

The study area is located in southeastern Louisiana in the vicinity of the city of New Orleans, and includes the Mississippi River-Gulf Outlet and adjacent wetlands in Orleans, St. Bernard, and Plaquemines Parishes, Louisiana. The original navigation project, the Mississippi River-Gulf Outlet was constructed in 1968 to provide a safer and shorter route to the Gulf of Mexico. Severe erosion and resulting loss of vegetated wetlands is occurring adjacent to the nonleveed banks of the Mississippi River-Gulf Outlet navigation channel. Enlargement of the top width of the channel, caused principally by ship and boat wakes has resulted in the loss of more than 4,200 acres of highly productive marsh adjacent to the waterway. A reconnaissance phase study of the wetland loss problem was completed in March 1988. The study found that measures to abate marsh loss and channel erosion were potentially economically justified on the basis of reduced Federal maintenance of the navigation canal. However, subsequent numerical modeling of the bank erosion and channel shoaling did not confirm estimates of increased future channel maintenance. The reconnaissance phase study was resumed to address measures to abate erosion and marsh loss because measures to mitigate those losses are potentially justified based on a combination of economic and non-monetary environmental benefits. The study is in accord with Administration policy. The Board of Commissioners of the Port of New Orleans is the local assuring agency for the existing Mississippi River-Gulf Outlet navigation project. A non-Federal cost-sharing partner for feasibility phase studies of bank erosion problems has not yet been identified.

Fiscal Year 1995 funds are being used to complete the reconnaissance phase and continue into the feasibility phase if the reconnaissance report is certified to be in accord with policy. The funds requested for Fiscal Year 1996 will be used to continue the feasibility phase of the study. The preliminary estimated cost of the feasibility phase is $2,600,000, which is to be shared on a 50-50 percent basis by Federal and non-Federal interests. Up to one-half of the non-Federal share may be in-kind services. A summary of study cost sharing is as follows:

Total Estimated Study Cost	$2,925,000
Reconnaissance Phase (Federal)	325,000
Feasibility Phase (Federal)	1,300,000
Feasibility Phase (non-Federal)	1,300,000

The reconnaissance phase is scheduled for completion in September 1995. A completion date is being determined for this feasibility study.

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[1] $340,000 of the amount available for FY 1995 is scheduled as programmed carryover into FY 1996.

Study	Total Estimated Federal Cost $	Allocation Prior to FY 1995 $	Allocation FY 1995 $	Tentative Allocation FY 1996 $	Additional to Complete After FY 1996 $
b. Flood Damage Prevention Studies:					
Illinois					
Alexander and Pulaski Counties	1,247,000	552,000	201,000[1]	175,000	319,000

The study area, approximately 740 square miles, is located in portions of the southernmost Illinois counties of Alexander, Pulaski, Union, Johnson, Massac, and Pope. For reasons of marginal flood control benefits, changing land use, the recognized environmental uniqueness of the area and changing Corps wetlands restoration policy, the investigation has shifted from its original focus on flood control to its present purpose of habitat restoration. Factors contributing to the area's uniqueness include: trees over 1,000 years old, the presence of both a state refuge (9,000 acre Cache River State Natural Area) and a national refuge (35,000 acre Cypress Creek National Wildlife Refuge), exceptionally large trees including 2 national records and 12 state champions, numerous endangered species, and two national natural landmarks (Lower Cache River Swamp and Heron Pond-Little Black Slough). The study area is one of 6 areas in the U.S. where 4 or more physiographic regions overlap. Of these, the Cache River is considered by many experts to be the most diverse. Serious habitat degradation has occurred along the Cache River at least partly caused by prior Corps projects, including the Cache River levee and the Cache River diversion projects. Sedimentation from tributary streams is choking Lower Cache River Swamp, and riverbed entrenchment threatens to drain Heron Pond-Little Black Slough. As a joint partnership, the U.S. Fish and Wildlife Service, Illinois Department of Conservation, The Nature Conservancy, and Ducks Unlimited have turned to the Corps of Engineers for environmental engineering solutions to these problems. If environmental engineering solutions are not undertaken, this unique wetland area will be lost within decades. The study is in accord with Administration policy. The Department of Conservation, State of Illinois, is the feasibility phase cost-sharing sponsor.

Fiscal Year 1995 funds are being used to continue into the feasibility phase. The funds requested for Fiscal Year 1996 will be used to continue the feasibility phase. The preliminary estimated cost of the feasibility phase is $1,390,000 which is to be shared on a 50-50 percent basis by Federal and non-Federal interests. Up to one-half of the non-Federal share may be in-kind services. A summary of study cost sharing is as follows:

Total Estimated Study Cost	$ 1,942,000
Reconnaissance Phase (Federal)	552,000
Feasibility Phase (Federal)	695,000
Feasibility Phase (non-Federal)	695,000

The reconnaissance phase was completed in November 1994. A completion date is being determined for this feasibility study.

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[1] $50,000 of the amount available for FY 1995 is scheduled as programmed carryover into FY 1996.

APPROPRIATION TITLE: General Investigations, Fiscal Year 1996 — Lower Mississippi Valley Division

Study	Total Estimated Federal Cost $	Allocation Prior to FY 1995 $	Allocation FY 1995 $	Tentative Allocation FY 1996 $	Additional to Complete After FY 1996 $
Louisiana					
Bayou Bartholomew	500,000	0	400,000[1]	100,000	0

The study area is located in northeast Louisiana and includes that portion of the Bayou Bartholomew drainage basin in Morehouse Parish from the Arkansas-Louisiana state line southward to the vicinity of Bastrop, Louisiana. The study will address the need to construct levees along Bayou Bartholomew in Louisiana. Currently, levees constructed as a part of the Ouachita River levee system extend along the south bank of Bayou Bartholomew and terminate just west of Bastrop. During flood peaks on Bayou Bartholomew, the Bayou overflows its high banks in several areas and causes severe flooding to and erosion of farmlands in Morehouse Parish. Some flows escaping to the east cross normal drainage divides and get behind or on the landside of the Ouachita River levee system and eventually find their way into Bayou LaFourche, aggravating flooding conditions in the Monroe urban area. Towns and communities that are directly affected by these floodwaters from Bayou Bartholomew include Bonita, Mer Rouge, Bastrop, parts of Monroe, and several smaller communities. The most recent flooding in the area occurred in 1983 and 1991. In 1991, U.S. Highways 165 and 425, as well as other parish and state roads north of Bastrop, had to be closed until floodwaters receded. State sources reported over 250 structures flooded representing over $5,000,000 in damage. Morehouse Parish records indicate over 600 applications were submitted to the Federal Emergency Management Agency for individual assistance and an even larger number registered with the local Red Cross for assistance. The 1991 flood caused extensive damage to roads, culverts, and local drainage systems and to the water system at Bonita. The study will address the need to provide flood control measures on Bayou Bartholomew in Louisiana to provide flood protection to urban and agricultural areas. The Tensas Basin Levee District understands study/project cost-sharing requirements and has indicated by letter 24 September 1992 a willingness to serve as the project sponsor. Support for the study has been reaffirmed during telephone conversations with the Levee Board in June 1994. Congressional support has been expressed by Senator J. Bennett Johnston. This study and its anticipated outputs, flood control, are in accord with Administration policy and will fully address any environmental concerns. The reconnaissance study is scheduled for completion in November 1995, which is 12 months after initiating the study.

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[1] $65,000 of the amount available for FY 1995 is scheduled as programmed carryover into FY 1996.

APPROPRIATION TITLE: General Investigations, Fiscal Year 1996 Lower Mississippi Valley Division

Study	Total Estimated Federal Cost $	Allocation Prior to FY 1995 $	Allocation FY 1995 $	Tentative Allocation FY 1996 $	Additional to Complete After FY 1996 $
Bayou Tigre, Erath	185,000	0	185,000[1]	0	0

Erath, Louisiana, with a population of 2,428 (1990), is located in Vermilion Parish (1990 population-50,055) in south-central Louisiana, approximately 20 miles south of Lafayette, Louisiana, and 10 miles from Vermilion Bay. Bayou Tigre extends from Erath southeastward to Bayou Carlin. Bayou Tigre is the outlet for drainage and flood flows from the Erath area. Flooding in the area is caused by the overflow of Bayou Tigre and its tributaries from rainfall and by tidal surges. The terrain in the Erath area is very flat and extensive shallow flooding occurs during heavy rainfalls. This flooding can be aggravated by high gulf stages. A major flood caused by heavy rainfall occurred in Erath in October 1984, causing damage to homes and businesses and forcing the evacuation of the Erath Hospital. The Vermilion Parish Police Jury is the potential local sponsor.

The reconnaissance study is scheduled for completion in March 1996, which is 12 months after initiating the study.

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[1] $50,000 of the amount available for FY 1995 is scheduled as programmed carryover into FY 1996.

APPROPRIATION TITLE: General Investigations, Fiscal Year 1996 Lower Mississippi Valley Division

Study	Total Estimated Federal Cost $	Allocation Prior to FY 1995 $	Allocation FY 1995 $	Tentative Allocation FY 1996 $	Additional to Complete After FY 1996 $
Black Bayou Diversion	280,000	0	280,000[1]	0	0

The Black Bayou Diversion, Louisiana study will address measures to provide drainage from the Mermentau River basin to the Calcasieu River basin in the interest of flood control and environmental restoration. Flooding in the area is due to subsidence, sea level rise, and upstream drainage improvements and land clearing. Local interests believe that measures to reduce the stages in the Mermentau River basin will restore the ability of wetland areas to regenerate, as well as reduce flooding in rural areas. Similar drainage measures were investigated in the Grand and White Lakes Water Management study completed in 1993. At that time, the flood control benefits attributable to the project did not outweigh the cost. For this reason, the major focus of the study will be on environmental restoration, although environmental benefits will be difficult to predict and quantify. Similar drainage structures of a small scale are also being considered for implementation under the Coastal Wetlands Planning, Protection, and Restoration Act. The Louisiana Department of Natural Resources is the non-Federal sponsor for projects under this act. The study area includes the parishes of Calcasieu and Cameron, with a total population of 177,394 (1990). The major urban area in the vicinity of the study area is the city of Lake Charles, Louisiana with a population of 70,580 (1990). The study area is in the Mermentau River basin which comprises 600,000 acres. Habitats in this area are open water, impounded marsh, agriculture, urban development, natural marsh, swamp forests, natural ridge and upland forest. About 50,000 acres of wetlands were lost between 1952 and 1974 or an annual loss of about 0.9 percent per year. These loss trends are continuing. Corps' projects in the area have been associated with contributing to the degradation of the environment. Support for this project is evidenced by the numerous letters from state and local interests. This study and its anticipated outputs are in accord with Administration policy.

The reconnaissance study is scheduled for completion in March 1996, which is 12 months after initiating the study.

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[1] $100,000 of the amount available for FY 1995 is scheduled as programmed carryover into FY 1996.

APPROPRIATION TITLE: General Investigations, Fiscal Year 1996 Lower Mississippi Valley Division

Study	Total Estimated Federal Cost $	Allocation Prior to FY 1995 $	Allocation FY 1995 $	Tentative Allocation FY 1996 $	Additional to Complete After FY 1996 $
Jefferson Parish	4,710,000	1,046,000	500,000	800,000	2,364,000

Jefferson Parish is located along the Mississippi River in southeast Louisiana. The parish is part of the major urban center in the New Orleans Metropolitan Statistical Area. Jefferson Parish has a population of 448,300 (1990). The study area is relatively flat and divided into three hydrologically-independent areas. Most of the developed areas are protected by levee systems from river and hurricane flooding and drained by pumps which discharge primarily into estuarine water bodies such as Lake Pontchartrain and Barataria Bay. The leveed areas are divided by natural and man-made barriers into many sub-basins which are webbed with drainage canals which terminate at pumping stations. Heavy rainfall has produced major floods in Jefferson Parish in 6 of the last 12 years. Between 1977 and 1986, 22,000 claims amounting to $122,000,000 were filed with Federal Emergency Management Agency. In April 1980, May 1980, April 1983 and November 1989, Jefferson Parish was declared a Federal disaster area due to rainfall flooding. Local interests have made substantial improvements to the flood control systems but have not kept pace with the increasing severity of the problem. The frequency and widespread impact of the floods warrant Federal investigation of possible solutions. A feasibility study will provide the opportunity to address potential solutions to flood damage reduction. Possible alternative solutions to the flooding problems include: drainage canal improvements, removal of canal obstructions, and increased pumping capacities. For sub-basins within existing Federal levee projects and for which the non-Federal sponsor accepted responsibility for evacuation of water resulting from all rain falling within the levees, the study report will recommend cost sharing based upon project benefits, applicable Administration policies, and in consideration of the contractural obligations of the sponsor in connection with previous Civil Works projects. The Feasibility Cost Sharing Agreement was signed by Jefferson Parish officials on 26 January 1994.

Fiscal Year 1995 funds are being used to continue the feasibility phase. Fiscal Year 1996 funds will be used to continue the feasibility phase. The preliminary estimate of the cost for the feasibility phase is $8,100,000, shared on a 50-50 percent basis by Federal and non-Federal interests. Up to one-half of the non-Federal share may be in-kind services. A summary of study cost sharing is as follows:

Total Estimated Study Cost	$8,760,000
Reconnaissance Phase (Federal)	660,000
Feasibility Phase (Federal)	4,050,000
Feasibility Phase (Non-Federal)	4,050,000

The reconnaissance phase was completed in January 1994. A completion date is being determined for this feasibility study.

APPROPRIATION TITLE: General Investigations, Fiscal Year 1996 Lower Mississippi Valley Division

Study	Total Estimated Federal Cost $	Allocation Prior to FY 1995 $	Allocation FY 1995 $	Tentative Allocation FY 1996 $	Additional to Complete After FY 1996 $
Lafayette Parish	745,000	537,000	174,000[1]	34,000	0

Lafayette Parish is located along the Vermilion River in southwest Louisiana. The study area encompasses the flood prone areas of Lafayette Parish in the Vermilion River Basin. The Vermilion River is the major stream within the study area and has an estimated drainage area of 561 square miles. Significant floods have occurred in Lafayette Parish in 1922, 1927, 1940, 1946, 1953, 1955, 1959, 1961, 1964, 1966, 1969, 1971, 1980, 1991, and most recently in 1993. The purpose of the study is to investigate the feasibility of measures to alleviate flooding problems associated with rainfall and Vermilion River stages. Lafayette Parish officials requested that the Corps investigate measures to prevent flooding of residential, commercial, and industrial properties in Lafayette Parish, Louisiana. Potential alternative solutions of the flooding problems include: channel improvements, removal of channel obstructions, diversions, detentions, levees, and pump stations. The Energy and Water Development Appropriation Acts of 1994 included $400,000 to initiate a General Investigations reconnaissance study. The potential local sponsor is the Lafayette Parish Council.

Fiscal Year 1995 funds are being used to continue the reconnaissance phase at full Federal expense. Fiscal Year 1996 funds will be used to complete the reconnaissance phase, which is scheduled for completion in December 1995.

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[1] $90,000 of the amount available for FY 1995 is scheduled as programmed carryover into FY 1996.

APPROPRIATION TITLE: General Investigations, Fiscal Year 1996 — Lower Mississippi Valley Division

Study	Total Estimated Federal Cost $	Allocation Prior to FY 1995 $	Allocation FY 1995 $	Tentative Allocation FY 1996 $	Additional to Complete After FY 1996 $
Lake Dauterive/Lake Fausse Pointe	125,000	0	125,000[1]	0	0

Lake Dauterive and Lake Fausse Point are freshwater lakes located along the west side of the Atchafalaya Basin Floodway in St. Martin and Iberia Parishes in south-central Louisiana. The lakes are connected and convey flood flows and drainage intercepted by the West Atchafalaya Basin Protection Levee (WABPL). The St. Martin Parish Policy Jury has requested assistance in reducing flooding adjacent to Lakes Dauterive and Fausse Point, expressing concerns that the channel between the two lakes was silted. Development along the lakes is sparse and is limited primarily to agriculture. Some residential flooding has occurred adjacent to Lake Dauterive. The St. Martin Parish Policy Jury is the potential local sponsor.

The reconnaissance study is scheduled for completion in March 1996, which is 12 months after initiating the study.

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[1] $25,000 of the amount for FY 1995 is scheduled as programmed carryover into FY 1996.

APPROPRIATION TITLE: General Investigations, Fiscal Year 1996 Lower Mississippi Valley Division

Study	Total Estimated Federal Cost $	Allocation Prior to FY 1995 $	Allocation FY 1995 $	Tentative Allocation FY 1996 $	Additional to Complete After FY 1996 $
Orleans Parish	2,610,000	760,000	600,000[1]	60,000	1,190,000

Orleans Parish is located along the Mississippi River in southeast Louisiana. The parish is part of the major urban center in the New Orleans Metropolitan Statistical Area. Orleans Parish and the City of New Orleans have coincident boundaries and a population of 497,000 (1990). The study area is relatively flat and divided into two hydrologically independent areas. Most of the developed areas are protected by levee systems from river and hurricane flooding and drained by pumps which discharge primarily into estuarine water bodies such as Lake Pontchartrain, Lake Borgne, and Barataria Bay. The leveed areas are divided by natural and man-made barriers into many sub-basins which are webbed with drainage canals which terminate at pumping stations. Heavy rainfall has produced major floods in Orleans Parish in 6 of the last 12 years. Between 1977 and 1986, nearly 18,000 claims were filed with the Federal Emergency Management Agency in Orleans Parish, totaling about $75,000,000 in covered losses to structures and contents. Local interests have made substantial improvements to the flood control systems but have not kept pace with the increasing severity of the problem. The frequency and widespread impact of the floods warrant Federal investigation of possible solutions. A feasibility study will provide the opportunity to address potential solutions to flood damage reduction. Possible alternative solutions to the flooding problems include: drainage canal improvements, removal of canal obstructions, and increased pumping capacities. For sub-basins within existing Federal levee projects and for which the non-Federal sponsor accepted responsibility for evacuation of water resulting from all rain falling within the levees, the study report will recommend cost sharing based upon project benefits, applicable Administration policies, and in consideration of the contractual obligations of the sponsor in connection with previous Civil Works projects. The Sewerage and Water Board of New Orleans signed the Feasibility Cost Sharing Agreement in June 1994.

Fiscal Year 1995 funds are being used to continue the feasibility phase. Fiscal Year 1996 funds will be used to continue the feasibility phase. The preliminary estimate of the cost for the feasibility phase is $3,900,000, shared on a 50-50 percent basis by Federal and non-Federal interests. Up to one-half of the non-Federal share may be in-kind services. A summary of study cost sharing is as follows:

Total Estimated Study Cost	$4,560,000
Reconnaissance Phase (Federal)	660,000
Feasibility Phase (Federal)	1,950,000
Feasibility Phase (Non-Federal)	1,950,000

The reconnaissance phase was completed in June 1994. A completion date is being determined for this feasibility study.

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[1] $390,000 of the amount available for FY 1995 is scheduled as programmed carryover into FY 1996.

APPROPRIATION TITLE: General Investigations, Fiscal Year 1996 — Lower Mississippi Valley Division

Study	Total Estimated Federal Cost $	Allocation Prior to FY 1995 $	Allocation FY 1995 $	Tentative Allocation FY 1996 $	Additional to Complete After FY 1996 $
St. Tammany Parish	500,000	0	500,000[1]	0	0

St. Tammany Parish covers approximately 854 square miles and is located in southeast Louisiana with a population of 141,561 (1990) which represents about 11.5 percent of the New Orleans Metropolitan Statistical Area. Many of the communities within the parish are within daily commuting distance of employment opportunities in the New Orleans central business district. St. Tammany Parish topography ranges from gently rolling hills, steep streambanks, and narrow floodplains in the north and central portions of the parish to flatter, marsh and swamp areas in the south-central portion along Lake Pontchartrain, with elevations ranging from 200 feet in the northern part down to 5 feet in the southern part of the parish. The parish includes the cities of Mandeville, Slidell, Covington, Abita Springs, and Madisonville and the unincorporated urban areas of Lacombe and Lewisburg. These areas are mostly unleveed, depend on gravity drainage, and are subject to the effects of interior rainfall flooding and riverine flooding. Coastal areas are also subject to flooding from high stages in Lake Pontchartrain due to storms and hurricanes and the combination of these other factors. The majority of the populated areas are located in the lower one-third of the parish. Major floods caused by heavy rainfall have occurred three of the last twelve years in St. Tammany Parish. During July 1993, intense rainfall caused flood damages to more than two dozen homes in the Slidell area, with 5 inches of rain in three hours recorded at one gaging station. During 5-8 April 1983, heavy rains, including 8.7 inches in 10 hours at Slidell, fell in most of south-central Louisiana. This storm caused widespread residential and commercial flooding in the urban and rural areas of St. Tammany Parish. Many homes and businesses in the Slidell area were inundated and street flooding was widespread. Major flooding from the Pearl River was experienced in northern and eastern Slidell in 1979, 1980, and 1983. Other significant Slidell floods in recent years due to rainfall were those of 25 March 1973 and 21-22 May 1974. Historically, flooding in the lower part of the St. Tammany Parish has also resulted from the combination of high stages in Lake Pontchartrain and heavy rainfall. This has occurred as a result of Hurricanes Betsy (1965), Camille (August 1969), and Juan (October-November 1985), when each time the parish was declared a disaster area. Combination flooding occurred in the vicinity of Mandeville for several days in August 1988, due to saturated soils, swollen streams, a high lake level, and intense rainfall. During this event, homes which had no previous record of flooding were inundated. While the primary purpose of the study is urban flood control and hurricane protection, another major issue is water quality in the waterbodies that surround the urban areas. Urban runoff from St. Tammany Parish is a source of pollutants that adversely impacts water quality in Lake Pontchartrain, Lake Borgne, Chandeleur Sound, and Breton Sound. Frequently, after rainfalls, Lake Pontchartrain is closed to swimming and Lake Borgne is closed to oyster harvesting. High levels of oxygen-demanding waste and chemical contaminants have been recorded where urban runoff is discharged to these larger waterbodies. Water quality improvements will only be investigated as an integral component of the flood control improvements. Possible alternative solutions to the flooding and water quality problems include: levees, drainage canal improvements, removal of canal obstructions, increased pumping capacities, detention ponds to allowpartial treatment of runoff entering Lake Pontchartrain and Lake Borgne, and other end-of-pipe treatments. This study and its anticipated outputs, flood control and hurricane protection, are in accord with Administration policy. The St. Tammany Parish Police Jury indicated verbally on 30 July 1993 that the parish is willing to cost-share in the feasibility study as local sponsor if the reconnaissance study is favorable and funds are available at that time. The reconnaissance study is scheduled for completion in March 1996, which is 12 months after initiating the study.

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[1] $252,000 of the amount available for FY 1995 is scheduled as programmed carryover into FY 1996.

APPROPRIATION TITLE: General Investigations, Fiscal Year 1996 Lower Mississippi Valley Division

Study	Total Estimated Federal Cost $	Allocation Prior to FY 1995 $	Allocation FY 1995 $	Tentative Allocation FY 1996 $	Additional to Complete After FY 1996 $
Mississippi					
Jackson Metropolitan Area	2,050,000	1,717,000	333,000[1]	0	0

The Jackson Metropolitan Area, Mississippi, a primary regional economic center, has major flood problems attributable to the Pearl River, with annual flood damages of approximately $12,000,000. The flood of record occurred in April 1979 causing an estimated $300,000,000 in damages. The Shoccoe Dam Project was authorized for construction by the Water Resources Development Act of 1986, Public Law 99-662, to provide needed flood protection to the Jackson area. However, Shoccoe Dam is no longer implementable from a local interest standpoint. In April 1988, Shoccoe's local sponsor, the Pearl River Basin Development District, requested the U.S. Army Corps of Engineers undertake an investigation of alternative flood control measures to Shoccoe Dam. Funds to accomplish the reconnaissance phase at full Federal expense were provided in February 1989. The reconnaissance report was completed in June 1990. The Feasibility Cost-Sharing Agreement was executed on 25 September 1991 and feasibility funds provided 1 October 1991. The study is in accordance with Administration policy.

Fiscal year 1995 funds are being used to complete the feasibility phase of the study. The primary alternative under consideration is a comprehensive levee system to protect the Jackson Metropolitan Area. A review of the existing Corps Jackson-East Jackson Levee Project is also being made. The estimated cost of the feasibility phase is $3,240,000 which is shared on a 50-50 percent basis by Federal and non-Federal interests. Approximately $757,000 of the non-Federal share is in-kind services. A summary of study cost sharing is as follows:

Total Estimated Study Cost	$3,670,000
Reconnaissance Phase (Federal)	430,000
Feasibility Phase (Federal)	1,620,000
Feasibility Phase (Non-Federal)	1,620,000

The reconnaissance phase was completed in September 1991. The feasibility study is scheduled for completion in October 1995.

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[1] $54,000 of the amount available for FY 1995 is scheduled as programmed carryover into FY 1996.

Study	Total Estimated Federal Cost $	Allocation Prior to FY 1995 $	Allocation FY 1995 $	Tentative Allocation FY 1996 $	Additional to Complete After FY 1996 $
Missouri					
St. Louis Region	1,700,000	288,000	562,000[1]	150,000	700,000

The St. Louis Region, Missouri, study will address the urban areas flooded by the Mississippi and Missouri Rivers in the city of St. Louis and in the counties of Jefferson, Ste. Genevieve, and St. Louis. The official 1990 population is 1,577,630 (city of St. Louis 396,685; Jefferson County 171,380; Ste. Genevieve County 16,037 and St. Louis County 993,528). It is estimated that perhaps 10 percent of this population is adversely impacted by Mississippi River flood events. The study will consider both structural and non-structural measures, identify the optimum economic solution, and address the feasibility of expanding the existing urban design level of Federal flood protection to a wider area. Reaches 3 and 4 of the city of St. Louis Federal flood protection project were completed in 1974 at a cost of $79,505,200 which includes $1,832,500 non-Federal contribution. This project provides urban height flood protection (500-year) to 3,160 acres of commercial and industrial properties and was sufficiently complete to prevent flood damages in 1973. The equivalent 1993 cost of this project is $206,714,000. This project prevented a total of $909,277,000 in flood damages prior its successful performance during the 1993 flood. These flood damages prevented will increase significantly when the 1993 flood damages prevented are verified and credited. The study is in accord with Administration policy. The feasibility cost-sharing sponsor has not been determined, however, it is anticipated that the potential sponsors will be the municipalities where the protection is provided. The study will examine the feasibility of merging the best features of the Federal Emergency Management Agency's damage reduction program with the Corps traditional economic analysis.

Fiscal Year 1995 funds will be used to continue the reconnaissance phase of the study. Fiscal Year 1996 funds in the amount of $100,000 will be used to complete the reconnaissance phase at full Federal expense. If the reconnaissance report is certified to be in accord with policy, Fiscal Year 1996 funds in the amount of $50,000 will be used to continue into the feasibility phase of the study. The preliminary estimated cost of the feasibility phase is $1,500,000 which is to be shared on a 50-50 percent basis by Federal and non-Federal interests. Up to one-half of the non-Federal share may be in-kind services.

Total Estimated Study Cost	$2,450,000
Reconnaissance Phase (Federal)	950,000
Feasibility Phase (Federal)	750,000
Feasibility Phase (Non-Federal)	750,000

The reconnaissance phase is scheduled for completion in May 1996. A completion date is being determined for this feasibility study.

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[1] $122,000 of the amount available for FY 1995 is scheduled as programmed carryover into FY 1996.

Study	Total Estimated Federal Cost $	Allocation Prior to FY 1995 $	Allocation FY 1995 $	Tentative Allocation FY 1996 $	Additional to Complete After FY 1996 $
c. Shoreline Protection Studies: None.					
d. Special Studies: None.					
e. Comprehensive Studies: None.					
f. Project Review Studies: None.					
3. PRECONSTRUCTION ENGINEERING AND DESIGN ACTIVITIES (PED) - NEW					
a. Navigation: None.					
b. Flood Control: None.					
c. Shoreline Protection: None.					
d. Multiple Purpose Power: None.					

Study	Total Estimated Federal Cost $	Allocation Prior to FY 1995 $	Allocation FY 1995 $	Tentative Allocation FY 1996 $	Additional to Complete After FY 1996 $
4. PRECONSTRUCTION ENGINEERING AND DESIGN ACTIVITIES (PED) - CONTINUING					
a. Navigation:					
Louisiana					
Port Fourchon	373,000	35,000	238,000[1]	100,000	0

The purpose of the project is to provide a navigation channel 24-feet deep by 300-feet wide from the upstream end of the jetties to channel mile 3.4. A 26-by 300-foot channel will also be constructed from the 26-foot contour in the Gulf of Mexico to the upstream end of the jetties. Restrictions imposed by the existing channel leading to Port Fourchon result in under-utilization of the port. Demand for oil rig repair facilities in close proximity to existing offshore oil fields is high and the restrictive dimensions of the existing channel require excessively long trips to alternate ports. The channel will be dredged hydraulically. Material from the initial dredging of the interior reach and from the first maintenance will be placed in a pipeline canal, an oil well canal, and an open water impoundment area. Subsequent maintenance dredging material from this reach will be placed in the impoundment area only. For both the initial dredging and future maintenance dredging from the first mile of the jetty reach, material will be placed on the shoreline east and west of the jetties. Material from the final two miles of this reach will be disposed of offshore. The recommended project is estimated to cost $4,654,000 with an estimated Federal cost of $2,423,000 and an estimated non-Federal cost of $2,231,000. The benefit-cost ratio is 2.2 to 1 based upon the latest economic analysis dated October 1994. The Division Engineer's Notice was issued on 29 August 1994. Preconstruction engineering and design funds were received on 13 September 1994. The local sponsor is the Greater Lafourche Port Commission. They strongly support the project and have consistently provided their cost share requirements during the feasibility phase.

The project is not authorized for construction. Cost sharing for the project will be in accordance with the Water Resources Development Act of 1986.

Fiscal Year 1995 funds are being used to continue the preconstruction engineering and design phase. Fiscal Year 1996 funds will be used to complete the preconstruction engineering and design phase in June 1996.

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[1] $253,000 of the amount available for FY 1995 is scheduled as programmed carryover into FY 1996.

APPROPRIATION TITLE: General Investigations, Fiscal Year 1996 Lower Mississippi Valley Division

Study	Total Estimated Federal Cost $	Allocation Prior to FY 1995 $	Allocation FY 1995 $	Tentative Allocation FY 1996 $	Additional to Complete After FY 1996 $
b. Flood Control:					
Illinois					
Nutwood Drainage and Levee District	$1,300,000	0	150,000[1]	150,000	1,000,000

The Nutwood Drainage and Levee District protects 10,360 acres of primarily agricultural land located in Greene and Jersey Counties, Illinois, on the east bank of the Illinois River between River Miles 15.2 and 23.7. The town of East Hardin lies within the project area. An existing Federally constructed levee provides roughly a 20-year level of protection from the Illinois River. The authorized project, authorized by Public Law 87-874, provides for the raising of the existing levee and includes modifications for seepage control and additional pumping capacity. When reevaluated in 1984, the project was estimated to cost $6,500,000 yielding a benefit-cost ratio of 1.4 to 1 at the grandfathered interest rate of 3 1/4 percent, but yielded only a benefit-cost ratio of 0.5 to 1 at an interest rate of 8 1/8 percent. The project was subsequently placed in an inactive status. Crop and property damages continue at an average annual rate in excess of $100,000. In the flood of 1993, the levee was breached causing a disruption of traffic on Illinois Route 100/16 for over 3 months. The reconnaissance study will update flood damage data and will reexamine the authorized project to determine if it is justified and meets current day needs. If not, the reconnaissance study will investigate alternative solutions to determine if there is a justified alternative. Both the Illinois Department of Transportation and the Nutwood Drainage and Levee District are interested in seeing remedial measures implemented. One or both may serve as the non-Federal sponsor.

Fiscal Year 1995 funds are being used to initiate the reconnaissance phase at full Federal expense. If the reconnaissance report is certified to be in accord with policy and current needs can be met by the authorized project, then a preconstruction engineering and design resumption would be the next step. If not, and if the reconnaissance study determines that there is a justified alternative, a cost shared feasibility study would be conducted. In the former case, the funds requested for Fiscal Year 1996 in the amount of $100,000 will be used to complete the reconnaissance phase at full Federal expense. The remaining $50,000 will be used to resume preconstruction engineering and design. A completion date is being determined for this preconstruction engineering and design effort.

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[1] $50,000 of the amount available for FY 1995 is scheduled as programmed carryover into FY 1996.

APPROPRIATION TITLE: General Investigations, Fiscal Year 1996 Lower Mississippi Valley Division

Study	Total Estimated Federal Cost $	Allocation Prior to FY 1995 $	Allocation FY 1995 $	Tentative Allocation FY 1996 $	Additional to Complete After FY 1996 $
Louisiana					
Comite River	5,100,000	4,250,000	690,000[1]	160,000	0

The Comite River is a major tributary of the Amite River. The Comite River drains an area of 348 square miles of agricultural land and urban development in southeast Louisiana. The Comite River has its confluence with the Amite River in the vicinity of Denham Springs, Louisiana. The Amite River empties into Lake Maurepas 54 miles below its confluence with the Comite River. The maximum flood of record in the Amite River Basin occurred in 1983 and caused approximately $170,000,000 in damages, relative to October 1983 price levels, including $43,800,000 occurring in the Comite River Sub-basin. East Baton Rouge Parish experienced $65,200,000 in damages, with 75 percent of the damages occurring along the Comite River and its tributary system. A feasibility report for the Comite River portion of the Amite River and Tributaries study was initiated in April 1985 and was completed in December 1990. The recommended Comite River project, estimated to cost about $87,600,000 with an estimated Federal cost of $44,100,000 and an estimated non-Federal cost of $43,500,000, consists of a 12 mile diversion channel, with associated control structures, fish and wildlife mitigation features and recreation features, from the Comite River to the Mississippi River. The estimated average annual benefits amount to $11,175,000. The estimated benefit-cost ratio is 1.4 to 1 based upon the latest economic analysis dated October 1993. A letter of intent dated 3 April 1989 identifies the Louisiana Department of Transportation and Development as the local sponsor.

The project is authorized for construction by the Water Resources Development Act of 1992 dated 31 October 1992 (PL 102-580), Section 101(11).

Fiscal Year 1995 funds are being used to continue preconstruction engineering and design. Fiscal Year 1996 funds will be used to complete preconstruction engineering and design in September 1996.

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[1] $61,000 of the amount available for FY 1995 is scheduled as programmed carryover into FY 1996.

APPROPRIATION TITLE: General Investigations, Fiscal Year 1996 Lower Mississippi Valley Division

Study	Total Estimated Federal Cost $	Allocation Prior to FY 1995 $	Allocation FY 1995 $	Tentative Allocation FY 1996 $	Additional to Complete After FY 1996 $
East Baton Rouge Parish	1,750,000	0	250,000	900,000	600,000

The study area encompasses major drainage streams in East Baton Rouge Parish. These streams include Beaver Bayou and tributaries, Blackwater Bayou and tributaries, Jones Creek and tributaries, Clay Cut Bayou, Ward Creek and tributaries, Bayou Fountain and tributaries, Monte Sano Bayou, and Bayou Manchac. In 1983, East Baton Rouge Parish experienced $65,000,000 in damages with about $20,000,000 associated with headwater flooding. A feasibility report to develop solutions to reduce flood damages associated with headwater flooding on these streams in East Baton Rouge Parish is scheduled for completion in April 1995. The recommended plan, estimated to cost about $142,800,000 with an estimated Federal Cost of $106,700,000 and an estimated non-Federal cost of $36,100,000, consists of channel modifications on Jones Creek and tributaries, Ward Creek and tributaries, Bayou Fountain, Beaver Bayou, and Blackwater Bayou and tributaries. The estimated average annual composite benefits amount to $24,358,000. The estimated composite benefit-cost ratio is 2.2 to 1 based upon the latest economic analysis dated October 1994. The potential local sponsor is the East Baton Rouge Parish Public Works Department, which has repeatedly indicated in meetings its intent to participate in construction of the project.

The project is not authorized for construction. Cost sharing for the project will be in accordance with the Water Resources Development Act of 1986.

Fiscal Year 1995 funds are being used to initiate the preconstruction engineering and design phase. Fiscal Year 1996 funds will be used to continue the preconstruction engineering and design phase. Preconstruction engineering and design is scheduled for completion in December 1996.

APPROPRIATION TITLE: General Investigations, Fiscal Year 1996 Lower Mississippi Valley Division

Study	Total Estimated Federal Cost $	Allocation Prior to FY 1995 $	Allocation FY 1995 $	Tentative Allocation FY 1996 $	Additional to Complete After FY 1996 $
West Bank - East of Harvey Canal	2,300,000	0	500,000	1,100,000	700,000

The purpose of the project is to provide standard project hurricane level of protection for the area east of the Harvey Canal on the west bank of the Mississippi River in the vicinity of New Orleans in Jefferson, Orleans, and Plaquemines Parishes. The area encompasses about 35,000 acres of mostly urban development. The feasibility report was completed in August 1994. The recommended project, estimated to cost about $119,700,000 with an estimated Federal cost of $77,800,000 and an estimated non-Federal cost of $41,900,000, includes construction of a combination of levees and floodwalls, a navigable floodgate in the Harvey Canal, and a 1,000 cubic feet per second modification of an existing pumping station with a rerouted discharge canal. In the protected area, the population is 142,000 (1990 census). The average annual costs are $9,779,000 for the area west of the Algiers Canal and $2,077,000 for the area east of the Algiers Canal. The average annual benefits are $44,549,000 for the area west of the Algiers Canal and $3,220,000 for the area east of the Algiers Canal. The benefit-cost ratio is 4.6 to 1 west of the Algiers Canal and 1.6 to 1 east of the Algiers Canal based upon the latest economic analysis dated August 1994. In a letter, 5 May 1993, the Governor designated the Louisiana Department of Transportation and Development as the non-Federal sponsor for the construction of the Westwego to Harvey Canal Hurricane Protection Project and modifications, which include the Lake Cataouatche area, and the East of Harvey Canal Hurricane Projection Project. The West Jefferson Levee District was named to administer the projects for the Department.

The project is not authorized for construction. Cost sharing for the project will be in accordance with the Water Resources Development Act of 1986.

Fiscal Year 1995 funds are being used to initiate preconstruction engineering and design. Fiscal Year 1996 funds will be used to continue the preconstruction engineering and design. The preconstruction engineering and design is scheduled for completion in December 1996.

c. Shoreline Protection: None.

d. Multiple Purpose Power: None.

APPROPRIATION TITLE: Construction, General - Local Protection - Flood Control

PROJECT: Rend Lake, Illinois (New Deficiency Correction)

LOCATION: The Casey Fork and Big Muddy Subimpoundment Dams are located in the upper reaches of the Rend Lake project, approximately 12 miles north of the city of Benton in Jefferson County, Illinois.

DESCRIPTION: The recommended plan will correct design deficiencies and prevent destruction of habitat and damage to wildlife. All work is programmed.

AUTHORIZATION: The original project was authorized by the Flood Control Act of 23 October 1962, as amended by Public Law 88-122.

REMAINING BENEFIT-REMAINING COST RATIO: Not applicable.

TOTAL BENEFIT-COST RATIO: Not applicable.

BASIS OF BENEFIT-COST RATIO: Not applicable.

SUMMARIZED FINANCIAL DATA

		Original Project
Actual Federal Cost		$45,437,000[1]
Actual Non-Federal Cost		9,941,000
Cash Contributions	$3,837,000	
Other Costs	6,104,000	
Total Original Project Cost		$55,378,000

STATUS (1 January 1995)	PERCENT COMPLETE	PHYSICAL COMPLETION SCHEDULE
Entire Project	0	Being Determined

PHYSICAL DATA

Dams: 2 Subimpoundment

The preliminary plan provides for constructing a sheetpile cut-off wall and replacing stone protection material.

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[1] Includes $999,100 received from Area Redevelopment Administration.

Remedial Work		ACCUM. PCT. of EST. FED. COST (Remedial Work Only)
Estimated Federal Cost	$5,300,000	
Estimated Non-Federal Cost	0	
Total Estimated Remedial Cost	$5,300,000	
Total Estimated Project Cost	$60,678,000	
Allocations to 30 September 1994	$45,437,000	
Conference Allowance for FY 1995	0	
Allocation for FY 1995	0	
Allocations through FY 1995	45,437,000	0
Allocation Requested for FY 1996	300,000	6
Programmed Balance to Complete after FY 1996	5,000,000	

JUSTIFICATION: The subimpoundment dams were intended to allow variations in the water level of the upstream pools, independently of the main pool level, to provide habitat for fish and wildlife (primarily waterfowl). The dams leak, requiring the Illinois Department of Conservation to pump extra water into the pools or to prematurely draw-down the pools when excessive through-flows cause concern. When the dams are overtopped during storm events (a common occurrence, provided for during design), increasingly severe damage has occurred. It is presently believed that even a moderate overtopping event could cause the dams to fail, thus destroying fish and wildlife habitat. Failure of the dams would also eliminate their silt-trapping capability, leading to increased turbidity in the main pool and a decline in the volume of storage for flood control and water supply purposes. Average annual benefits of the design deficiency correction project have not been quantified.

FISCAL YEAR 1996: The requested amount of $300,000 will be applied as follows:

Initiate Remedial Work	$200,000
Planning, Engineering, and Design	60,000
Supervision and Administration	40,000
Total	$300,000

NON-FEDERAL COST: It is anticipated that the Illinois Department of Conservation will continue to operate and maintain the facilities under the terms of an existing Memorandum of Understanding, at an estimated cost of $25,000 per year.

Requirements of Local Cooperation	Payments During Construction and Reimbursements	Annual Operation, Maintenance, Repair, Rehabilitation, and Replacement Costs
Operate the subimpoundment facilities and perform routine maintenance	0	$25,000

STATUS OF LOCAL COOPERATION: The Illinois Department of Conservation operates and maintains the existing subimpoundment facilities under the terms of a Memorandum of Understanding executed 24 May 1984. Performance under these provisions has been satisfactory. As no sharing of first costs will be required and as a workable Operation and Maintenance Agreement is already in effect, it is not believed that execution of a separate Project Cooperation Agreement (PCA) will be necessary.

COMPARISON OF FEDERAL COST ESTIMATES: The current Federal cost estimate of $5,300,000 has not previously been presented to Congress.

STATUS OF ENVIRONMENTAL IMPACT STATEMENT: The final Environmental Impact Statement for the overall project was revised and approved in 1976. The design deficiency correction project will provide for rehabilitating existing facilities. It is believed that National Environmental Protection Agency requirements will be satisfied by preparing an Environmental Assessment and Finding of No Significant Impact.

OTHER INFORMATION: Previous funding included the actual cost of $45,437,000 for the construction of the original project, which was completed in FY 1967.

APPROPRIATION TITLE: Construction, General - Major Rehabilitation - Locks and Dams (Navigation)

PROJECT: Mississippi River, Lock and Dam 24, Illinois and Missouri (New)

LOCATION: Lock and Dam 24 is located in Calhoun County, Illinois, and Pike County, Missouri, at approximately Mile 273.5 above the mouth of the Ohio River in the vicinity of Clarksville, Missouri.

DESCRIPTION: The project plan provides for the rehabilitation of portions of the structure. The work will include replacement of miter gates, auxiliary lock closure structure, power distribution system, lock motors and controllers, control system, and miter gate machinery; addition of a protection cell, bendway weirs, and debris openings in the dam guard wall; and repairs to several dam bridge columns.

AUTHORIZATION: River and Harbor Act of 1935, Water Resources Development Acts of 1986 and 1992.

REMAINING BENEFIT-REMAINING COST RATIO: 2.3 to 1 at 8 percent.

TOTAL BENEFIT-COST RATIO: 2.3 to 1 at 8 percent.

BASIS OF BENEFIT-COST RATIO: Based on the Major Rehabilitation Report, Lock and Dam No. 24, Mississippi River, approved in February 1993 at October 1992 price levels. Benefit-cost ratio is a composite of all items analyzed for major rehabilitation.

STATUS (1 January 1995)	PERCENT COMPLETE	PHYSICAL COMPLETION SCHEDULE
Entire Project	0	Being Determined

SUMMARIZED FINANCIAL DATA

Estimated Federal Cost		23,100,000
General Appropriation	11,550,000	
Inland Waterways Trust Fund	11,550,000	
Estimated Non-Federal Cost		0
Total Estimated Project Cost		23,100,000

	General Appropriation	Inland Waterways Trust Fund	ACCUM. PCT. OF EST. FED. COST
Allocations to 30 September 1994	0	0	
Conference Allowance for FY 1995	0	0	
Allocation for FY 1995	0	0	
Allocations through FY 1995	0	0	
Allocation Requested for FY 1996	1,000,000	1,000,000	9
Programmed Balance to Complete after FY 1996	10,550,000	10,550,000	
Unprogrammed Balance to Complete after FY 1996	0	0	

PHYSICAL DATA

Lock: Major rehabilitation of the existing lock will include replacing miter gates, power distribution system, motors, controllers, and machinery; and construction of a protection cell, bendway weirs, and debris openings in the guard wall.

Dam: Major rehabilitation of the existing dam will include replacing the power distribution and control systems, the auxiliary lock closure structure, and repairing the bridge colums.

JUSTIFICATION: Lock and Dam 24 has been operating for over 50 years. While ordinary maintenance has been performed to keep the facility operating, the wear and tear on some items is beyond ordinary maintenance. Consequently, in order to provide an acceptable level of reliability, major rehabilitation of various structural, electrical, and mechanical components of the facility must be undertaken. The average annual benefits, all navigation, are $4,735,000 based on 1 October 1992 price levels.

FISCAL YEAR 1996: The requested amount will be applied as follows:

Initiate:	Auxiliary Lock Closure Gate	$ 40,000
	Miter Gate Replacement	100,000
	Electrical and Mechanical Rehabilitation	600,000
Planning, Engineering, and Design		1,020,000
Supervision and Administration		240,000
Total		$2,000,000

NON-FEDERAL COST: In accordance with the cost-sharing and financing concepts reflected in the Water Resources Development Act of 1986, 50 percent of the total cost of construction will be derived from the Inland Waterways Trust Fund.

STATUS OF LOCAL COOPERATION: None required.

COMPARISON OF FEDERAL COST ESTIMATE: The current Federal cost estimate is $23,100,000. This estimate has not previously been presented to Congress.

STATUS OF ENVIRONMENTAL IMPACT STATEMENT: An environmental assessment resulted in a Finding of No Significant Impact which was signed 1 February 1993. The rehabilitation report was coordinated with the U.S. Fish and Wildlife Service, U.S. Environmental Protection Agency, and the Missouri and Illinois Departments of Conservation. The U.S. Fish and Wildlife Service concurred with the biological assessment contained in the environmental assessment.

OTHER INFORMATION: The project requires no mitigation.

APPROPRIATION TITLE: Construction, General - Channels and Harbors (Navigation)

PROJECT: Mississippi River-Gulf Outlet, Louisiana (Continuing)

LOCATION: The project is located in the southeastern portion of Louisiana, east of the Mississippi River. It is a deep draft seaway canal extending for approximately 76 miles in a southeasterly direction from the city of New Orleans to the Gulf of Mexico.

DESCRIPTION: The plan of improvement consists of four basic items: (1) a completed channel extending from the Inner Harbor Navigation Canal to the minus 38-foot contour in the Gulf of Mexico; (2) completed jetties and dikes along the channel in Breton Sound; (3) a new lock with connecting channels is unprogrammed pending a decision to initiate construction; however, planning for the shiplock is continuing; and (4) foreshore protection along the north and south side of the ship channel extending from the Inner Harbor Navigation Canal to the end of the hurricane protection levee. Foreshore protection is completed along the south bank, east of Bayou Bienvenue to the end of the hurricane protection levee, and is programmed on the south bank, west of Bayou Bienvenue to the intersection of the MRGO and GIWW. Completion of remaining foreshore protection along the MRGO is unprogrammed until need arises.

AUTHORIZATION: River and Harbor Act of 1956, Water Resources Development Act of 1976, and the Water Resources Development Act of 1986.

REMAINING BENEFIT - REMAINING COST RATIO: 4.4 to 1 at 2-5/8 percent.

TOTAL BENEFIT - COST RATIO: 4.2 to 1 at 2-5/8 percent.

INITIAL BENEFIT - COST RATIO: 1.6 to 1 at 2-5/8 percent (FY 1961).

BASIS OF BENEFIT - COST RATIO: Benefits are from the latest available draft evaluation report submitted in April 1982 at 1981 price levels.

SUMMARIZED FINANCIAL DATA

				STATUS (1 January 1995)	PERCENT COMPLETE	PHYSICAL COMPLETION SCHEDULE
Estimated Federal Cost (Corps of Engineers)			$584,000,000	MRGO Unit	90	Indefinite[1]
Programmed Construction		$106,781,000		Shiplock Unit	0	Indefinite[2]
Unprogrammed Construction		477,219,000				
				Entire Project	75	Indefinite
Estimated Federal Cost (U.S. Coast Guard)			45,000			
Programmed Construction		0				
Unprogrammed Construction		45,000				
Estimated Non-Federal Cost			333,000,000			
Programmed Construction		8,811,000				
Cash Contributions	0					
Other Cost	8,811,000					
Estimated Non-Federal Cost						
Unprogrammed Construction		324,189,000				
Cash Contributions	0					
Other Cost	324,189,000					
Total Estimated Programmed Construction Cost			115,592,000			
Total Estimated Unprogrammed Construction Cost			801,453,000			
Total Estimated Project Cost			917,045,000			
				ACCUM. PCT. OF EST. FED. COST		
Allocations to 30 September 1994			100,696,000			
Conference Allowance for FY 1995			1,000,000			
Allocation for FY 1995			1,000,000[3]			
Allocations through FY 1995			101,696,000	17		
Allocation Requested for FY 1996			3,200,000	18		
Programmed Balance to Complete after FY 1996			1,885,000			
Unprogrammed Balance to Complete after FY 1996			477,219,000			

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[1] Schedule for completion of foreshore protection is indefinite until need arises.

[2] Schedule for completion of the shiplock unit is indefinite pending a decision to initiate construction (see other information paragraph).

[3] Reflects $158,000 reduction assigned as savings and slippage and $158,000 reprogrammed to the project.

PHYSICAL DATA

Channels:
 Channel, 36 feet deep by 500 feet wide from Inner Harbor
  Navigation Canal to Chandeleur Islands; 66 miles
 Channel, 36 feet deep by 500 feet wide from Mississippi
  River to the Gulf Outlet
 Eased Entrance Channel widens gradually from 500 feet at
  Chandeleur Islands to 600 feet at the 38 foot contour
  in the Gulf of Mexico; 9.38 miles
 Turning Basin, vicinity of Inner Harbor Navigation Canal
Locks:
  New Lock, 110 feet wide by 40 feet deep by 1,200 feet long
Levees and Floodwalls: Foreshore Protection - 23.0 miles
  Levees - 6.0 miles

Relocations:
 Roads (Completed)
 High Level Bridge, Louisiana Highway
 No. 47 (Paris Road Bridge)(Completed)
 Low Level Bridge, St. Claude
  Avenue
 Semi-High Level Bridge, Claiborne
  Avenue
 Dikes in Breton Sound:
 Northeast Retention Dike to Mile 20.2
 Southwest Retention Dike to Mile 14.8

JUSTIFICATION: New Orleans is the gateway to the great system of inland waterways of the central valley of the nation. Adequate outlets to the Gulf of Mexico are essential to provide economical transportation to this area. The project provides an additional outlet to the Gulf that is shorter than the Mississippi River route and one which is not subject to as large stage fluctuations as is the river. The improvement provides a tidewater outlet and harbor sufficiently spacious for dispersion of docks and cargo-handling facilities, thus permitting flexible operations of the inland and seagoing commerce which is utilizing the river, the tidewater canal, and the Gulf Intracoastal Waterway. The project provides savings in sailing time and ship turnaround time, reduction in navigation hazards, and relief from congestion.

The existing Inner Harbor Navigation Canal Lock passes barge traffic between the Mississippi River and the Gulf Intracoastal Waterway at New Orleans and is a vital link in the Gulf Intracoastal Waterway system. The lock also is the connecting link for ship traffic between the Mississippi River-Gulf Outlet and the Mississippi River at New Orleans. The existing lock has a maximum practical capacity for barge traffic of approximately 30,000,000 tons. The number of ships locked from 1970 through 1993 averaged about 197 per year. This is a reduction in ship lockage since 1961, and is due in part to the development of the Mississippi River-Gulf Outlet channel and the inadequacy of the Inner Harbor Navigation Canal Lock for ship traffic. Studies indicate that, with a new lock, barge traffic would generally be expected to increase to about 45,000,000 tons by 2035 and that the number of ship lockage by 2035 would be approximately 1,800. Average annual benefits are as follows:

Annual Benefits	Amount
Navigation	$ 98,760,000
Vehicular	21,000,000
Advanced Replacement of Bridges	3,200,000
Savings to Existing Project	1,700,000
Total Annual Benefits	$124,660,000

COMMERCE:

Commodity	Mississippi River Tons [1]		Gulf Outlet Tons [2]	
	1976	1990 [3]	1976	1990 [3]
Grain	7,223,588	24,165,000	89,433	5,000
Coal	7,808,629	35,792,000	1,373,964	58,000
Crude Petroleum	19,279,316	14,121,000	0	0
Petroleum Products	10,389,615	11,159,000	93,801	39,000
Sulphur	3,618,158	2,299,000	0	48,000
Primary Metal Products	5,261,298	2,262,000	120,082	680,000
Industrial Chemicals	1,371,786	3,271,000	420,622	81,000
Agricultural Chemicals	851,659	3,509,000	612,848	553,000
Miscellaneous Metallic Ores and Concentrates	127,458	1,298,000	438,548	362,000
Miscellaneous Nonmetallic Minerals and Cement Products	181,538	1,226,000	702,017	313,000
Wood and Paper Products	1,054,604	1,133,000	720	4,000
Food and Kindred Products	24,963,264	2,285,000	111,735	11,000
Miscellaneous Cargo	6,632,274	5,737,000	9,369	427,000
Subtotal	88,763,187	108,257,000	3,973,139	2,581,000
Through traffic	143,850,863	178,993,000	2,998,509	4,478,000
Total	232,614,050	287,250,000	6,971,648	7,059,000

The average tonnage through the Inner Harbor Navigation Canal Shiplock from 1979 thru 1993 is 23,251,653 tons; the deep draft savings per ton for dry bulk is $.40, and for general cargo is $1.85. The shallow draft savings per ton is $1.30 for all cargo.

The size of ships expected in the future would carry up to 60,000 DWT (deadweight tons) for dry bulk and 40,000 DWT for general cargo.

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[1] Total tonnage Mississippi River, New Orleans to Mouth of Passes, Oceangoing and Internal. This tabulation is for Mile 106 to the Gulf which the standard New Orleans reach of the Mississippi River used in the Waterborne Commerce Statistics.

[2] Mississippi River-Gulf Outlet, LA Oceangoing and Internal.

[3] Last year available.

FISCAL YEAR 1996: The requested amount will be applied as follows:

MRGO UNIT:	
Initiate and Complete:	
Foreshore Protection - Sta 344 - 365	$ 745,000
Planning, Engineering and Design for Shiplock Unit	10,000
Supervision and Administration	45,000
Subtotal	$ 800,000
SHIPLOCK UNIT:	
Planning, Engineering and Design	$2,400,000
Subtotal	$2,400,000
Total	$3,200,000

NON-FEDERAL COST: The project will be cost shared in accordance with the provisions of Section 844 of the Water Resources Development Act of 1986. The costs of the shiplock unit will be apportioned between general cargo navigation and inland navigation. Those costs assigned to inland navigation will be funded 50 percent from the Inland Waterway Trust Fund and 50 percent from the general fund of the U.S. Treasury. Those costs assigned to general cargo navigation will be cost shared in accordance with Section 101 of the Act, that is, if incrementally economically justified, the non-Federal interests will provide lands, easements, rights of way, dredged material disposal areas and relocations; pay during construction 25 percent of the cost of general cargo navigation features to a depth of 45 feet; and pay for 50 percent of the cost of general cargo navigation features at a depth greater than 45 feet.

The apportionment of cost is deferred pending resolution of the lock location and the determination by the Assistant Secretary of the Army, Civil Works, of use patterns as required by Section 844. The non-Federal sponsor must comply with the following requirements:

Requirements of Local Cooperation	Payments During Construction and Reimbursements	Annual Operation Maintenance, Repair Rehabilitation and Replacement Costs
Mississippi River Gulf Outlet (other than shiplock unit)		
Provide lands, easements, rights-of-way, and dredged material disposal areas.	$ 8,811,000	$ 65,000
Shiplock Unit		
Provide lands, easements, rights-of-way, and dredged material disposal areas.	42,000,000	
Modify or relocate utilities and facilities (except railroad bridges) where necessary for construction of the project.	282,189,000	
Make an additional cash payment to bring to 25 percent the total non-Federal share of costs allocated to general navigation to a depth of 45 feet or less.	To be determined	
Make an additional cash payment to bring to 50 percent the total non-Federal share of costs allocated to general navigation at a depth greater than 45 feet.	To be determined	
Pay an additional 10 percent of costs allocated to general navigation, less an amount equal to the value of lands, easements, rights of way, dredged material disposal areas, and utility and facility relocations.	0	
Total Non-Federal Costs	$333,000,000	$ 65,000

STATUS OF LOCAL COOPERATION: Assurances of local cooperation furnished by the Board of Commissioners of the Port of New Orleans were accepted on behalf of the United States on 29 August 1957. The Board of Commissioners executed amended assurances covering the provisions of the Uniform Relocations Assistance and Real Property Acquisition Policies Act of 1970, Public Law 91-646, which were accepted on behalf of the United States on 21 April 1975. Supplemental assurances reflecting the changes made necessary by enactment of the Water Resources Development Act of 1976 were requested on 11 September 1978. By letter of 18 September 1978, local interests stated that they could not respond to our requests because plans for the lock at the Inner Harbor Navigation Canal site were in a very preliminary stage. In November 1983, the Board of Commissioners was informed of the selected plan and its costs, including their share, based on traditional cost sharing. By letter of 17 February 1984, the Board stated that it could not support the plan at that time because of the uncertainty of cost sharing and the financial situation of the State of Louisiana. However, by letter dated 11 February 1985, the Governor of Louisiana provided the necessary assurances to proceed with the coordination of an appropriate course of action for public involvement and to process the Evaluation Report. The public involvement program is progressing consistent with the Evaluation Report schedule. See Other Information paragraph regarding the schedule for the Evaluation Report.

COMPARISON OF FEDERAL COST ESTIMATES: The current Federal cost estimate of $584,000,000 is an increase of $9,000,000 from the latest estimate ($575,000,000) presented to Congress (FY 1995). This change includes the following item:

Item	Amount
Price Escalation on Construction Features	$ 9,000,000
Total	$ 9,000,000

STATUS OF ENVIRONMENTAL IMPACT STATEMENT: The final Environmental Impact Statement was filed with the Council on Environmental Quality on 14 May 1976, and published in the Federal Register on 21 May 1976. A separate statement is being prepared for the shiplock unit. The draft statement for the shiplock unit is scheduled for submission to the EPA in August 1995, and the final statement is scheduled to be submitted to EPA in March 1996.

OTHER INFORMATION: Funds to initiate preconstruction engineering and design were appropriated in Fiscal Year 1957 and funds to initiate construction were appropriated in Fiscal Year 1958.

The existing lock was completed in 1923, by non-Federal interests, and had been leased by the Federal Government since 1944. On 1 July 1986, the lock, adjacent land, and facilities were purchased from the Board of Commissioners of the Port of New Orleans for $3,800,000. By purchasing the lock, the Corps received fee title to the lock and appurtenances with operation and maintenance responsibility for the St. Claude and Florida Avenue bridges transferring to the Board of Commissioners of the Port of New Orleans.

President Carter, as a result of the review of water resource projects in April 1977, recommended that the site for the proposed shiplock be changed from the recommended lower site in St. Bernard Parish to the Inner Harbor Navigation Canal in Orleans Parish, and that further study be conducted to determine whether repair or replacement (expansion) is needed of the existing lock at the existing site. It was further recommended that, if replacement and expansion are deemed necessary, special care should be taken to minimize dislocation and disruption of residents near the site. A draft

Evaluation Report documenting the Phase I studies, including the tentatively selected plan (40 by 110 by 1200 foot lock located adjacent to and on the east side of the existing lock) was submitted for review in April 1982. A final report was never prepared due to lack of support from a local sponsor. In February 1985 the State of Louisiana expressed its intent to provide the assurances of local cooperation at the appropriate time, contingent upon availability of funds and the state's priorities. At that time, the Evaluation Study was resumed.

In response to the resumption of the Evaluation Study, the St. Bernard Parish Police Jury, on 10 April 1987, passed a resolution opposing the siting of the new lock in St. Bernard Parish. On 30 August 1988, state elected officials representing the Lower Ninth Ward expressed opposition to the lock at the IHNC site. On 18 April 1989, the St. Bernard Parish Police Jury passed a resolution unanimously opposing a new lock and connecting channel at Violet in the Parish.

Based on Congressional committee guidance in the FY 1991 Energy and Water Development Appropriations Bill, an Open Planning Process has been adopted in an attempt to build consensus among the major stakeholders for siting the shiplock at the IHNC site. The Corps and the Port of New Orleans were directed to ". . . develop a comprehensive plan to identify and mitigate to the maximum extent practicable, any adverse social and cultural impacts of the project." The plan will include ". . . measures to provide adequate housing, street circulation and enhanced neighborhood amenities to insure the communities adjacent to the project remain as complete, liveable neighborhoods during and after construction of the project." The legislation specifically directed the Corps to strictly follow Federal historic preservation policies in evaluating the impact of lock replacement. Also expected is full compliance with the provisions of the 1986 Water Resources Development Act, which requires "full participation of members of minority groups living in the affected areas" in any work related to the replacement of the lock. Finally, the legislation directed the Corps to give "maximum consideration to lock replacement alternatives which minimize residential and business disruption while meeting the goal of improving waterborne commerce. Neighborhood groups, navigation interests, affected businesses, local, governmental officials, and the Port of New Orleans comprise various committees that are discussing all the major aspects of the various alternatives being studied at this site. The Corps of Engineers and the Port of New Orleans are providing the engineering, economic, and social analyses to the committee for their deliberations.

The public involvement committees' activities will be continuing throughout the study. The final Evaluation Report, based on the Open Planning Process, is scheduled for completion in January 1996.

The Evaluation Report will include designs of various lock alternatives to be constructed at the Industrial Canal site. The alternatives include different sizes (shallow and deep draft), bridge configurations construction methods and locations with respect to the existing lock. The construction methods involve conventional, cast-in-place construction and prefabricated, float-in construction. The different locations include: adjacent to the east of the existing lock; adjacent to and west of the existing lock; at the exact site of the existing lock; and in the Industrial Canal north of the existing lock. The latter location is the only one that has the potential to obtain consensus from all affected stakeholders. The Evaluation Report will focus on this location in more detail.

The existing Florida Avenue bridge (vehicular and railroad) has been assumed in our studies to be replaced by others. The vehicular bridge will be replaced by the State of Louisiana. They have preliminary designs for a high level bridge and have partial funding (about $32 million) already appropriated by the State Legislature. Final plans are scheduled to be completed by mid-1996. Efforts are underway to get additional funding required for the high level bridge (estimated to cost between $70 - $75 million). The railroad bridge has been approved to be replaced under the Truman Hobbs authority. The Coast Guard recommended that the existing railroad bridge is a hazard to navigation, thereby justifying the use of Truman Hobbs. The New Orleans Dock Board will be responsible for the design and replacement of the railroad bridge. They began design at the end of 1992 and construction is scheduled to begin in June 1996.

The Senate Report accompanying the FY 1994 Energy and Water Development Appropriations Act included language recommending examination of all alternatives for removing the siphon near Florida Avenue bridge, the convening of all interests to determine best course of action and preparation of a report on this matter. The Evaluation Report assumes that the siphon will be removed prior to our initiating construction on this project, at no cost to the Federal Government. Section 305 of H.R. 4422, the House version of the FY 1995 Coast Guard Authorization Bill, states that the removal of the siphon, an appurtenant structure to the bridge, will be part of the Truman Hobbs Act.

APPROPRIATION TITLE: Construction General - Channels and Harbors (Navigation)

PROJECT: Mississippi River Ship Channel, Gulf to Baton Rouge, Louisiana (Continuing)

LOCATION: The project is located in the southeast portion of Louisiana below Baton Rouge, Louisiana, consisting of the Mississippi River and its major outlet to the Gulf of Mexico, Southwest Pass.

DESCRIPTION: The authorized project will provide more efficient deep-draft navigation access to the New Orleans and Baton Rouge reaches of the Mississippi River via Southwest Pass by enlarging the existing channel to a project depth of 55 feet; enlarging the adjacent channel along the left descending bank in New Orleans to a 40-foot depth, providing a turning basin at Baton Rouge, and providing training works in the passes and in four crossings between New Orleans and Baton Rouge to reduce maintenance. Construction of mitigation measures is required due to the saltwater intrusion caused by the deeper channel. The scheduled work includes enlargement of the existing channel to an initial depth of 45 feet in the reach from the Gulf of Mexico to Mile 232.4 above New Orleans, the 40-foot enlargement in New Orleans Harbor, and construction of the mitigation works. The unprogrammed work includes enlargement of the 45-foot channel to 55 feet in the reach from the Gulf of Mexico to Mile 232.4, enlargement of the existing 40-foot channel to 55 feet from Mile 232.4 to Mile 233, construction of a turning basin at Baton Rouge, and training works in the passes.

AUTHORIZATION: Supplemental Appropriations Act of FY 1985, Water Resources Development Acts of 1986 and 1988, and the Energy and Water Development Appropriations Act of FY 1993.

REMAINING BENEFIT - REMAINING COST RATIO: 7.0 to 1 at 8-1/8 percent.

TOTAL BENEFIT - COST RATIO: 11.1 to 1 at 8-1/8 percent.

INITIAL BENEFIT - COST RATIO: 8.1 to 1 at 8-1/8 percent (FY 1985).

BASIS OF BENEFIT - COST RATIO: Benefits are from the latest available evaluation approved in July 1981 at 1980 price levels.

SUMMARIZED FINANCIAL DATA

COMPLETE				
Estimated Appropriation Requirement (Corps of Engineers)				157,000,000
Programmed Construction			33,493,000	
Unprogrammed Construction			123,507,000	
Estimated Appropriation Requirement (US Coast Guard)				1,200,000
Programmed Construction			0	
Unprogrammed Construction			1,200,000	
Estimated Total Appropriation Requirement				158,200,000
Programmed Construction			33,493,000	
Unprogrammed Construction			124,707,000	
Future Non-Federal Reimbursement				935,000
Programmed Construction			935,000	
Unprogrammed Construction			0	
Estimated Federal Cost (Ultimate) (Corps of Engineers)				157,265,000
Programmed Construction			32,558,000	
Unprogrammed Construction			124,707,000	
Estimated Non-Federal Cost (Ultimate)				377,935,000
Programmed Construction			21,077,000	
Cash Contributions		5,809,000		
Other Costs		14,333,000		
Reimbursements		935,000		
Navigation	935,000			

STATUS (1 January 1995) SCHEDULE	PERCENT	PHYSICAL COMPLETION
Phase I (Gulf-Mile 181, 45')	95	March 1996[1]
Phase II (Mile 181-Baton Rouge, 45')	100	December 1994
Phase III (Gulf-Baton Rouge, 55')	0	Indefinite[2]
Entire Project	30	March 1996[3]

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[1] Applies only to initial mitigation work. Completion of mitigation will depend on future growth in Plaquemines Parish.

[2] Remaining work in Phase III is unprogrammed pending a decision to construct this feature.

[3] Does not include future mitigation in Phase I.

SUMMARIZED FINANCIAL DATA
(Continued)

					Accum. Pct of Est. Fed Cost.
Unprogrammed Construction			356,858,000		
Cash Contributions		120,902,000			
Other Costs		235,956,000			
Reimbursements		0			
Navigation	0				
Total Estimated Programmed Construction Cost				53,635,000	
Total Estimated Unprogrammed Construction Cost				481,565,000	
Total Estimated Project Cost				535,200,000	
Allocations to 30 September 1994				20,890,000	
Conference Allowance for FY 1995				5,100,000	
Allocation for FY 1995				3,585,000[1]	
Allocations through FY 1995				24,475,000[2]	16
Allocation Requested for FY 1996				0	16
Programmed Balance to Complete after FY 1996				9,018,000	
Unprogrammed Balance to Complete after FY 1996				123,507,000	

PHYSICAL DATA

Channels and Canals:
Southwest Pass: 55 feet deep (Mean Low Gulf) by 750 feet wide, 17.5 miles.
Southwest Pass Bar Channel: 55 feet deep (Mean Low Gulf) by 600 feet wide from Mile 18.0 below Head of Passes to the -55 foot (Mean Low Gulf) contour in the Gulf of Mexico (Mile 22.1 below Head of Passes)

Mississippi River: 55 feet deep (Mean Low Gulf) by 750 feet wide, 233 miles long.
Baton Rouge Turning Basin: 55 feet deep (Mean Low Gulf) by 1,600 feet wide, 4,000 feet long.

Breakwaters and Seawalls:
Control and contraction structures in South Pass and Pass-a-Loutre. Size and number of structures to be determined in the future.

Mitigation Measures:
Underwater dredged material sill at Mile 64 Above Head of Passes (top elevation -55.0 Mean Low Gulf), modifications to the Belle Chasse water treatment plant with water supply pipelines to the West Pointe-a-la-Hache and Boothville water treatment plants, and construction of a water supply reservoir at Davant, LA to supply the East Pointe-a-la-Hache water treatment plant. Until construction of a permanent mitigation plan is completed, an interim plan has been implemented to barge fresh raw water, with Operations and Maintenance, General funds, to three existing water treatment plants during periods of increased salinity caused by the deeper channel. (See Other Information).

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[1] Reflects $807,000 reduction assigned as savings and slippage, and $708,000 reprogrammed from the project.
[2] Reflects $3,298,000 in programmed carryover into FY 1996.

JUSTIFICATION: According to the latest data, the ports of New Orleans and Baton Rouge are the number one and number five ports in the United States, respectively, based on the total tonnage of waterborne commerce. Much of this commerce is in liquid bulk and dry bulk oceangoing cargo which could be shipped much more economically using a deeper channel. The cargo was previously shipped in smaller ships or in lightly loaded larger ships over the 40-foot deep channel. The construction of the 45-foot channel has resulted in significant savings in the transportation cost of the oceangoing commerce moving over the channel. Deepening the channel to 55 feet will result in additional significant savings. The average annual benefits, all navigation, are $1,292,000,000, based on October 1980 prices.
Existing Commerce (tons):

Commodity	1985	1986	1987	1988	1989 [1]
Grain and Grain Products	17,213,239	18,550,994	17,171,964	17,598,559	15,049,975
Corn	54,761,466	37,878,975	59,661,426	63,361,660	73,133,667
Wheat	9,665,383	9,446,891	10,538,917	15,075,492	21,939,949
Soybeans	26,755,348	33,626,176	35,472,316	30,096,923	23,321,216
Meat and Dairy Products	68,878	54,340	25,320	26,524	17,125
Lumber and Lumber Products	420,889	439,474	317,502	341,993	393,732
Fish, Fruit and Food Products	572,800	610,197	527,281	549,023	727,296
Marine Shells	1,887,388	1,529,816	1,140,834	1,059,269	837,022
Ferrous and Non-Ferrous Ores	6,911,462	7,540,987	8,152,518	9,291,412	11,501,016
Coal and Coal Products	33,705,287	38,668,568	37,671,635	40,807,706	43,519,492
Crude Petroleum	36,945,029	39,760,730	43,448,439	43,033,069	52,575,789
Petroleum and Petroleum Products	51,203,181	54,794,924	54,666,892	63,202,968	69,056,184
Building Products	1,220,875	1,709,739	2,200,438	1,466,159	704,484
Chemicals and Chemical Products	40,501,258	46,836,784	45,287,254	45,091,171	30,361,276
Ferrous and Non-Ferrous Products	9,470,706	11,753,418	9,788,809	11,622,026	11,528,576
Salt	4,960,723	4,721,011	3,149,571	3,862,866	4,073,101
Sulphur	3,878,969	3,392,444	4,051,915	3,807,783	3,159,089
Sugar and Molasses	2,048,137	2,241,321	1,898,057	1,499,520	1,639,429
Machinery and Machinery Parts	542,366	709,138	461,009	651,796	950,151
Miscellaneous	22,184,701	25,253,260	27,355,136	32,997,516	40,130,960
Total	324,918,085	339,519,187	362,987,233	385,443,435	404,619,529

The average deep draft tonnage trafficked thru the project from 1979 thru 1989 was 183,197,960 tons. The deep draft savings per ton for liquid bulk cargo is $4.60; for dry bulk cargo, $6.60, and for general cargo, $.90. The ships expected to traffic the project in the future would carry up to 150,000 DWT (dead weight tons). Dredged material will be deposited on lands adjacent to the channel from Venice, Louisiana to the Gulf of Mexico. A substantial amount of these lands are within existing rights-of-way. Disposal for construction work above Venice, Louisiana, will be accomplished in the main channel of the Mississippi River.

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[1] Latest available information.

FISCAL YEAR 1996: The total program amount, including the requested and programmed carryover amounts of $0 and $3,298,000, respectively, with an unobligated carryover of $798,000 into FY 1997, will be applied as follows:

Complete Permanent Saltwater Intrusion Mitigation Facilities	$2,355,000
Planning, Engineering and Design - Phase I	70,000
Supervision and Administration	75,000
Total Project	$2,500,000

NON-FEDERAL COSTS: In accordance with the cost sharing and financing concepts reflected in the Water Resources Development Acts of 1986 and 1988, the non-Federal sponsor must comply with the requirements listed below.

Requirements of Local Cooperation	Payments During Construction and Reimbursements	Annual Operation, Maintenance, Repair, Rehabilitation, and Replacement Costs
Phase I, 45', Gulf - Mile 181.0		
Provide lands, easements, rights-of-way and dredged material disposal areas.	$ 145,000	
Modify or relocate pipelines and submarine cables where necessary for the construction of the project.	6,795,000	
Dredge New Orleans Harbor.	1,082,000	
Pay 25 percent of costs to construct the channel to 45 feet (cash contributions and/or equivalent work).	3,738,000	
Pay 25 percent of costs for mitigation reimbursement contributions and/or equivalent work.	5,289,000	
Pay maintenance dredging costs adjacent to New Orleans harbor wharves.		$ 1,309,000
Pay an additional 10 percent of the cost allocated to deep draft navigation within a period of 30 years following completion of construction [which is partially offset by a credit allowed for the value of lands, easements, rights-of-way, relocations and dredged material disposal areas].	935,000	
Subtotal, Phase I	$ 17,984,000	$ 1,309,000

Requirements of Local Cooperation (Continued)	Payments During Construction and Reimbursements	Annual Operation, Maintenance, Repair, Rehabilitation, and Replacement Costs
Phase II, 45', Mile 181 to Baton Rouge		
Modify or relocate pipelines and submarine cables where necessary for the construction of the project.	$ 1,022,000	
Pay 25 percent of costs to construct the channel to 45 feet (cash contributions).	2,071,000	
Subtotal, Phase II	$ 3,093,000	
Phase III, 55', Gulf to Baton Rouge		
Provide lands, easements, rights-of-way and dredged material disposal areas.	$ 400,000	
Modify or relocate pipelines and submarine cables where necessary for the construction of the project.	235,556,000	
Pay 25 percent of costs to construct the channel to 45 feet (cash contributions).	1,231,000	
Pay 50 percent of costs to construct the channel from 45 feet to 55 feet (cash contributions).	119,671,000	
Pay 50 percent of maintenance dredging costs between 45 feet and 55 feet.		$46,932,000
Subtotal, Phase III	$356,858,000	$46,932,000
Project Total	$377,935,000	$48,241,000

The non-Federal sponsor has agreed to make all payments of first costs (excluding the reimbursement) concurrently with project construction and to pay an additional 10 percent reimbursement of the costs allocated to deep draft navigation less a credit for the value of lands, easements, rights-of-way, relocations, and dredged material disposal area, within a period of 30 years following completion of construction.

STATUS OF LOCAL COOPERATION: On 13 September 1985, the Governor of the State of Louisiana designated the Louisiana Department of Economic Development, formerly the Department of Commerce, as the local sponsor for the project. A Local Cooperation Agreement for a 45-foot channel from the Gulf of Mexico to Mile 181 Above Head of Passes (Phase I) was executed on 30 June 1986. The first supplement to the Local Cooperation Agreement reflecting the Water Resources Development Act of 1986 cost-sharing provisions was executed on 15 June 1987. A second supplement reflecting the changes required by the Water Resources Development Act of 1988 was executed on 25 June 1990. A third supplement was executed on 28 May 1993 that provides for the local sponsor to construct the permanent saltwater intrusion mitigation facilities. (See Other Information for more details). A Project Cooperation Agreement for the 45-foot channel from Mile 181 to Mile 232.4 (Phase II) was executed on 3 September 1993.

COMPARISON OF FEDERAL COST ESTIMATES: The current Federal cost estimate of $157,000,000 is an increase of $2,000,000 from the latest estimate ($155,000,000) presented to Congress (FY 1995). This change includes the following items:

Item	Amount
Post Contract Award and Other Estimating Adjustments	$- 316,000
Price Escalation on Construction Features	2,163,000
Authorized Modifications	153,000
Total	$2,000,000

STATUS OF ENVIRONMENTAL IMPACT STATEMENT: The final Environmental Impact Statement was filed with the Environmental Protection Agency on 2 July 1982. A Supplemental Information Report to this final Environmental Impact Statement addressing the prototype dredging of Fairview Crossing was filed with the Environmental Protection Agency on 28 July 1983. A similar report addressing construction of a prototype saltwater intrusion sill was filed with the Environmental Protection Agency on 14 September 1983. A Supplemental Information Report addressing the underwater dredged material sill at Mile 64 Above Head of Passes, to mitigate for increased saltwater intrusion, was filed with the Environmental Protection Agency on 24 September 1985. An Environmental Assessment/Finding of No Significant Impact for the Venice, Louisiana to Mile 181 Above Head of Passes reach, for dredging four crossings and the approach channels to berthing areas in New Orleans Harbor, was filed with the Environmental Protection Agency on 18 December 1987. Another Environmental Assessment/Finding of No Significant Impact addressing the interim saltwater mitigation plan and revised marsh creation quantities was filed with the Environmental Protection Agency on 22 April 1987. Another Environmental Assessment/Finding of No Significant Impact addressing the training works required at four crossings between mile 181 Above Head of Passes and mile 232.4 Above Head of Passes was signed on 13 July 1990. Another Environmental Assessment/Finding of No Significant Impact addressing the permanent saltwater intrusion mitigation plan (water pipeline construction) was signed on 15 January 1991. An Environmental Assessment/Finding of No Significant Impact evaluating dredging of Sardine Point was completed 1 April 1991.

OTHER INFORMATION: Funds to initiate preconstruction engineering and design were appropriated in FY 1982, and funds to initiate construction were appropriated in FY 1985.

Dredging of the 45-foot channel south of New Orleans to the Gulf of Mexico was completed on 1 December 1987. Dredging of the 45-foot channel from New Orleans to Mile 181 Above Head of Passes was completed on 17 December 1988. Dredging of the 45-foot channel from Mile 181 Above Head of Passes to Baton Rouge (Mile 232.4) was completed on 9 December 1994.

As a result of the severe drought conditions in the midwest part of the country during the summer of 1988, interim saltwater intrusion mitigation measures for the 45-foot channel were implemented on 30 June 1988, with construction of an underwater dredged material sill in the Mississippi River at Mile 63.7 Above Head of Passes which was completed to an elevation of -45.0 feet NGVD on 1 August 1988.

The other part of the interim mitigation plan was to barge fresh water to the three municipal water treatment plants at Boothville and at East and West Pointe-a-la-Hache, Louisiana, downstream of the sill. Approximately 101 million gallons of water was barged, commencing on 14 July 1988 and continuing through 2 December 1988. Operations and Maintenance General funds were used for both the barging operation and sill construction. The intrusion event was dealt with effectively, and both the sill and the barging of freshwater to Lower Plaquemines Parish were demonstrated to be practicable.

The permanent mitigation plan involves the State of Louisiana taking the responsibility for having Plaquemines Parish upgrade their existing water distribution system to handle the increase in saltwater intrusion caused by the 45-foot channel. The Corps of Engineers will reimburse the State for the Federal share (75%) of the cost for this plan which is more cost effective than our barging plan for a 45-foot channel. The State will relieve us of our responsibility to mitigate for the potable water needs in lower Plaquemines Parish once this plan is complete. Federal participation in the construction of the permanent mitigation plan is limited by a cost cap. The cost cap was incorporated into the third supplemental local cooperation agreement for Phase I. The cost cap is based on the least costly Federal alternative which is the cost to barge water to Plaquemines Parish during times of increased salinity caused by the deeper channel over the 50-year project life. Once the cost of the permanent mitigation plan equals or exceeds the cost cap, Federal participation in mitigation for Phase I of the project will end. Construction of the permanent mitigation plan began on 21 October 1993. We will still be responsible for construction of the underwater sill to mitigate above Mile 64 above Head of Passes when required. Design Memorandum Supplement No. 6 covering the permanent mitigation plan was approved on 7 December 1992.

An initial economic analysis of the Phase II reach indicated that maintenance dredging costs exceeded project benefits. To justify this portion of the project, submerged rock dikes were proposed at four crossings (Red Eye, Medora, Granada, and Alhambra) within the Phase II reach. Mathematical modeling, navigation simulations and physical model testing were conducted at the Waterways Experiment Station (WES) to study the dikes. Industry pilots participated in the navigation simulations at WES. Although the dike plan was economically justified, industry reaction to the dikes was negative. The industry representatives believe that the dikes would present a navigation hazard and would cause traffic congestion. The Baton Rouge Port Commission and the local sponsor agreed with the navigation industry and informed the Corps that they did not support the rock dike plan. Upon review of these objections, further development of the rock dike concept was discontinued. At the request of the navigation industry, we reevaluated a dredging only plan (no rock dikes). The reanalysis considered possible benefits and cost reductions that were not evaluated in the initial economic analysis. Additional savings in the cost of relocations and documentation of additional benefits for the deeper channel have resulted in an economic analysis in which the benefits exceed the costs. Based on this reanalysis we resubmitted the Design Memorandum Supplement on Phase II and it was approved 10 August 1993. Language contained in the FY 1993 Energy and Water Development Appropriations Conference Report directed the initiation of construction on Phase II immediately after execution of the Project Cooperation Agreement. The Project Cooperation Agreement was executed on 3 September 1993. The construction of the 45-foot channel in this reach began on 31 July 1994 and was completed on 9 December 1994.

The State of Louisiana requested that we perform a preliminary analysis of Phase III, the remaining work in the authorized project. This analysis included a review of cost estimates and design assumptions and proposals for maintenance dredging reductions. The State is reviewing our analysis before making a decision on proceeding with Phase III.

SUMMARIZED FINANCIAL DATA FOR PROGRAMMED SEPARABLE ELEMENTS:

PHASE I

Estimated Appropriation Requirement (Corps of Engineers)				27,081,000
Programmed Construction			27,081,000	
Unprogrammed Construction			0	
Estimated Appropriation Requirement (US Coast Guard)				0
Programmed Construction			0	
Unprogrammed Construction			0	
Estimated Total Appropriation Requirement				27,081,000
Programmed Construction			27,081,000	
Unprogrammed Construction			0	
Future Non-Federal Reimbursement				935,000
Programmed Construction			935,000	
Unprogrammed Construction			0	
Estimated Federal Cost (Ultimate) (Corps of Engineers)				26,146,000
Programmed Construction			26,146,000	
Unprogrammed Construction			0	
Estimated Non-Federal Cost (Ultimate)				17,984,000
Programmed Construction			17,984,000	
Cash Contributions		3,738,000		
Other Costs		13,311,000		
Reimbursements		935,000		
Navigation	935,000			
Unprogrammed Construction			0	
Cash Contributions		0		
Other Costs		0		
Reimbursements		0		
Total Estimated Programmed Construction Cost				44,130,000
Total Estimated Unprogrammed Construction Cost				0
Total Estimated Project Cost				44,130,000

REMAINING BENEFIT - REMAINING COST RATIO FOR PHASE I: Not applicable because construction is substantially complete.

TOTAL BENEFIT - COST RATIO FOR PHASE I: The Phase I channel has been complete since 1988. A total benefit-cost ratio was not computed for Phase I as a separable element.

PHASE II

Estimated Appropriation Requirement (Corps of Engineers)			6,212,000
Programmed Construction		6,212,000	
Unprogrammed Construction		0	
Estimated Appropriation Requirement (US Coast Guard)			0
Programmed Construction		0	
Unprogrammed Construction		0	
Estimated Total Appropriation Requirement			6,212,000
Programmed Construction		6,212,000	
Unprogrammed Construction		0	
Future Non-Federal Reimbursement			0
Programmed Construction		0	
Unprogrammed Construction		0	
Estimated Federal Cost (Ultimate) (Corps of Engineers)			6,212,000
Programmed Construction		6,212,000	
Unprogrammed Construction		0	
Estimated Non-Federal Cost (Ultimate)			3,093,000
Programmed Construction		3,093,000	
Cash Contributions	2,071,000		
Other costs	1,022,000		
Reimbursements	0		
Unprogrammed Construction			0
Cash Contributions		0	
Other Costs		0	
Reimbursements		0	
Total Estimated Programmed Construction Cost			9,305,000
Total Estimated Unprogrammed Construction Cost			0
Total Estimated Project Cost			9,305,000

REMAINING BENEFIT - REMAINING COST RATIO FOR PHASE II: 1.25 to 1 at 8-1/4 percent.

TOTAL BENEFIT-COST RATIO FOR PHASE II: 1.25 to 1 at 8-1/4 percent.

APPROPRIATION TITLE: Construction, General - Channels and Harbors (Navigation)

PROJECT: Mississippi River Between the Ohio and Missouri Rivers (Regulating Works) (Continuing)

LOCATION: The project involves improvement of the Mississippi River from the mouth of the Ohio River to the mouth of the Missouri River at mile 195 above the mouth of the Ohio River.

DESCRIPTION: The project consists of a navigation channel 9 feet deep and not less than 300 feet wide with additional width in bends, from the mouth of the Ohio River to the northern boundary of the City of St. Louis, a distance of approximately 191 miles, thence 200 feet wide, with additional width in bends, to the mouth of the Missouri River. It will be achieved by means of dikes, revetment, construction dredging, and rock removal. All work is programmed.

AUTHORIZATION: River and Harbor Acts of 1910, 1927, and 1930.

REMAINING BENEFIT-REMAINING COST RATIO: 22.7 to 1 at 2.5 percent.

TOTAL BENEFIT-COST RATIO: 11.8 to 1 at 2.5 percent.

INITIAL BENEFIT-COST RATIO: 4.5 to 1 at 2.5 percent (FY 1961).

BASIS OF BENEFIT-COST RATIO: Benefits are based on the Upper Mississippi River Master Plan Report of 1982 at 1986 price level. The Document which provides the basis for benefits is the River and Harbor Act of 21 January 1927, Rivers and Harbors Commission Document No. 12, 70th Congress, 1st session.

SUMMARIZED FINANCIAL DATA			STATUS (1 January 1995)	PERCENT COMPLETE	PHYSICAL COMPLETION SCHEDULE
Estimated Federal Cost		$210,000,000	Entire Project	79	Being Determined
Estimated Non-Federal Cost		0			
Cash Contributions	0				
Other Cost	0				
Total Estimated Project Cost		$210,000,000			

SUMMARIZED FINANCIAL DATA (Continued)

		ACCUM % OF EST FED COST
Allocations to 30 September 1994	169,037,000	
Conference Allowance for FY 1995	6,400,000	
Allocation for FY 1995	5,387,000[1]	
Allocations through FY 1995	174,424,000	83
Allocation Requested for FY 1996	5,700,000	86
Programmed Balance to Complete After FY 1996	29,876,000	
Unprogrammed Balance to Complete after FY 1996	0	

PHYSICAL DATA:

Channel: 195 miles

Ohio River to St. Louis	9 x 300 feet
St. Louis to Missouri River	9 x 200 feet

JUSTIFICATION: The Mississippi River between the Ohio and Missouri Rivers is a major artery of the inland waterway system. Commerce in this reach has increased from 4,500,000 tons in 1945 to an estimated 115,000,000 tons in 1994 worth approximately $30 billion. Commerce is expected to increase to 167,000,000 tons by the year 2020; therefore, it is essential that construction of project works be continued at a rate which will insure 9-foot channel depths for a year-round navigation season. The average annual benefits, all navigation are $261,809,000 based on 1 October 1994 price levels.

FISCAL YEAR 1996: The total program amount, including the requested and programmed carryover amounts of $5,700,00 and $1,000,000, respectively, will be applied as follows:

Initiate:	
Fort Chartres Phase III, Miles 140-125	$ 150,000
Kaskaskia Bend Phase IV, Mile 125-113	151,000
Grand Tower Reach Phase III, Miles 90-67	89,000
Greenfield Channel Phase IV, Mile 5-0	327,000
Complete:	
Mosenthien Reach I, Miles 195-184	664,000
Ivory Landing Phase II, Miles 184-154	846,000
Red Rock Channel Phase IV, Miles 103-90	981,000
Grand Tower Reach, Phase II, Miles 90-67	500,000
Devil's Island, Phase II, Miles 67-40	500,000
Eliza Point Channel Phase IV, Miles 20-5	632,000
Continue:	
Lands and Damages	30,000
Planning, Engineering and Design	1,416,000
Supervision and Administration	414,000
Total	$6,700,000

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[1] Reflects $1,013,000 reduction assigned as Savings and Slippage and $1,000,000 in programmed carryover into FY 1996.

NON-FEDERAL COST: None required.

STATUS OF LOCAL COOPERATION: None required.

COMPARISON OF FEDERAL COST ESTIMATES: The current Federal cost estimate of $210,000,000 is a decrease of $5,000,000 from the latest estimate ($215,000,000) presented to Congress (FY 1995). This change includes the following item:

Item	Amount
Price Escalation on Construction Features	$ 5,000,000
Total	$ 5,000,000

STATUS OF ENVIRONMENTAL IMPACT STATEMENT: The final Environmental Impact Statement was filed with the Council on Environmental Quality on 8 April 1976 and published in the Federal Register on 23 April 1976. An Environmental Analysis was completed for the Rock Removal and Finding of No Significant Impact signed on 28 October 1988.

OTHER INFORMATION: Planning was initiated prior to 1910; Construction was initiated in 1910. The great flood of 1993 was most severe. The flood caused serious damages to the dikes and revetments of the Regulating Works Project and the magnitude of the damage and changes to the Mississippi River are presently being developed.

APPROPRIATION TITLE: Construction, General - Locks and Dams (Navigation)

PROJECT: Melvin Price Lock and Dam, Illinois and Missouri (Continuing)

LOCATION: Melvin Price Lock and Dam is located in Madison County, Illinois, and St. Charles County, Missouri, in the vicinity of Alton, Illinois, at approximately mile 200.8 above the mouth of the Ohio River and approximately two miles downstream from the existing Locks and Dam 26.

DESCRIPTION: The project plan provides for the construction of one 1,200-foot lock; a new gated dam with 9 tainter gates, provision for expansion, and an overflow dike; removal of most of the existing structure; and relocation/abandonment of the Burlington-Northern Railroad bridge. Mitigation land will be provided to compensate for wildlife losses due to creation of a new pool for the two-mile distance downstream of the existing structure. Recreation facilities will be developed with the city of Alton, Illinois, consistent with the Water Resources Development Acts of 1986, 1990, and 1992. The project is part of the Upper Mississippi River Navigation System. All work is programmed.

AUTHORIZATION: Public Law 95-502, Title I - Replacement of Locks and Dam 26; Water Resources Development Acts of 1986, 1990, and 1992.

REMAINING BENEFIT-REMAINING COST RATIO: The remaining benefit-remaining cost ratio is not applicable since the project is nearing completion.

TOTAL BENEFIT-COST RATIO: 2.1 to 1 at 6 7/8 percent.

INITIAL BENEFIT-COST RATIO: 1.6 to 1 at 6 7/8 percent (FY 1974).

BASIS OF BENEFIT-COST RATIO: Benefits are based on Supplement No. 2 to Design Memorandum No. 2, approved on 31 August 1979 at October 1978 price levels.

SUMMARIZED FINANCIAL DATA			ACCUM PCT. OF EST. FED COST	STATUS: (1 January 1995)	PERCENT COMPLETE	PHYSICAL COMPLETION SCHEDULE
Estimated Federal Cost		738,500,000		Entire Project	94	[1]
				Lock and Dam	99	Dec 1994
Estimated Non-Federal Cost		4,700,000		Open to Navigation	100	Feb 1990
Cash Contribution	4,700,000					
Other	0					
Total Estimated Project Cost		743,200,000				
Allocations to 30 September 1994		708,138,000 [2]				
Conference Allowance for FY 1995		12,100,000				
Allocation for FY 1995		10,185,000 [3]				
Allocations through FY 1995		718,323,000	97			
Allocation Requested for FY 1996		2,400,000	98			
Programmed Balance to Complete after FY 1996		17,777,000				
Unprogrammed Balance to Complete after FY 1996		0				

PHYSICAL DATA

Lock: One - 1,200 feet x 110 feet
Dam: Non-navigable 9 tainter gates
Overflow Dike: Earth Embankment, 2000 feet
Spur Dike: Earth Embankment, 2.4 miles
Relocations: Roads ($2,233,000); Railroad ($13,933,000); Utilities ($15,979,000)
Pumping Plant: One - 225 cubic feet per second
Lands and Damages: Acres - 4,286; Type - Predominantly crop, brush, and timberland and some commercial, recreational, and industrial land and improvements fronting the river.
Improvements - Industrial, commercial, and recreation buildings.

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[1] Being determined.
[2] Includes $1,320,000 to initiate design of Melvin Price Lock and Dam, Second Lock in FY 1985.
[3] Reflects $1,915,000 reduction assigned as Savings and Slippage and $3,500,000 in programmed carryover into FY 1996.

JUSTIFICATION: The poor physical condition of the old Locks and Dam No. 26 and the inability of the locks to handle current and projected traffic without costly delays made replacement imperative. Both the dam and locks were set on piles, which were driven into the riverbed sands and were not supported by bedrock. The structure, which was placed in operation in 1938, had a history of excessive deflections, settlements, and loss of foundation material. Remedial measures were undertaken to correct deficiencies, but permanent repair of the old structure was impractical because of engineering and cost considerations. The average annual waterborne commerce tonnage (1984-1994) was 69 million tons valued at approximately $18 billion. Grains, chemicals, petroleum, and coal account for 90 percent of this traffic. Because of the small size of the locks, multiple lockages were required to pass a complete tow measuring 1,200 feet in length. The average delay to tows at the old Locks No. 26 was approximately 10.5 hours. Based on the Master Plan Study (authorized by P.L. 95-502), a single lock 110 feet wide by 1,200 feet long would have an estimated capacity of 94 to 100 million tons per year. The length of 1,200 feet permits tows to lock through as a single unit, thus eliminating the delays from double locking and congestion. Future tow sizes are expected to remain at 110 feet wide by 1,200 feet long. Total transportation charges for commodity movements by inland water range between 40 and 60 percent lower than least cost alternative modes. More than 60 percent of traffic is grain, the bulk of which is for export. Gulf export grain now moves, depending on an origin and volume, at approximately $4.00 to $6.00 savings per ton. Average annual benefits are as follows:

Annual Benefits	Amount
Navigation	$82,678,000
Recreation	469,000
Total	$83,147,000

FISCAL YEAR 1996: The total program amount, including the requested and programmed carryover amounts of $2,400,000 and $3,500,000, respectively, will be applied as follows:

Initiate:	
Access Road Illinois	$100,000
Erosion Control Below Dam	10,000
Visitor Center	790,000
Visitor Center Exhibits	50,000
Esplanade Facilities	50,000
Initiate and Complete:	
Minimum Facilities Phase I	314,000
Continue:	
Lands and Damages	75,000
Miscellaneous Clearing Illinois	10,000
Operation and Maintenance Manuals	50,000
Miscellaneous Operating Equipment	35,000
Complete:	
Auxiliary Crane Replacement	327,000
Guardrail on Dam	332,000
Remove I-Wall and Downstream Guidewall	2,711,000
Boat Dock Landing	39,000
As-Built Drawings	34,000
Planning, Engineering, and Design	573,000
Supervision and Administration	400,000
Total	$ 5,900,000

NON-FEDERAL COST: In accordance with the cost-sharing and financing concepts reflected in the Water Resources Development Act of 1986, as amended, which are applicable to unstarted separable elements, the non-Federal sponsor must comply with the requirements listed below.

Requirements of Local Cooperation	Payments During Construction and Reimbursements	Annual Operation, Maintenance, Repair, Rehabilitation, and Replacement Costs
Pay one-half of the separable and joint costs allocated to recreational navigation, pay one-half of the separable cost of recreation facilities, and bear all costs of operation, maintenance, repair, rehabilitation, and replacement of recreation and recreational navigation facilities.	$4,700,000	$306,000
Total Non-Federal Costs	$4,700,000	$306,000

STATUS OF LOCAL COOPERATION: The state of Missouri reviewed the proposed plan for recreation facilities and submitted an updated letter of intent on 15 December 1983 to cost-share on a 50-50 percent basis the initial cost of the development and to operate and maintain the facilities following completion of construction. By letter of 3 October 1985, the Missouri Inter-Agency Council for Outdoor Recreation withdrew the state's intent to participate in the recreation features of the project due to anticipated development costs, operation and maintenance costs, and the availability of private facilities presently serving Pool 26. The Water Resources Development Acts of 1990 and 1992 contain provisions that allow the state of Illinois and the Corps to enter into a cost-sharing agreement for the construction of riverfront recreation facilities. The city of Alton, Illinois, submitted a letter of intent dated 13 February 1991 for sharing the cost of developing recreation facilities along the riverfront at Alton, in the vicinity of the existing structure. A plan for recreational development will be prepared for submittal in February 1996.

The Water Resources Development Act of 1992 amended the 1990 Act by allowing cost sharing with other non-Federal interests.

COMPARISON OF FEDERAL COST ESTIMATES: The current Federal cost estimate of $738,500,000 is an increase of $4,400,000 from the latest estimate ($734,100,000) presented to Congress (FY 1995). This change includes the following items:

Item	Amount
Price Escalation on Construction Features	$ - 718,000
Design Changes	+ 75,000
Post Contract Award and Other Estimating Adjustments (including contingency adjustments)	+ 5,043,000
Total	$ + 4,400,000

STATUS OF ENVIRONMENTAL IMPACT STATEMENT: The final Environmental Impact Statement was filed with the Council on Environmental Quality on 24 August 1976 and published in the Federal Register on 8 September 1976.

OTHER INFORMATION: Funds to initiate preconstruction engineering and design were appropriated in FY 1970, and funds to initiate construction were appropriated in FY 1974.

In accordance with Public Law 97-118, the project name changed from Lock and Dam 26 (Replacement) to Melvin Price Lock and Dam.

Fish and Wildlife mitigation costs are $3,857,000.

Dredge material disposal sites were used on Ellis Island during construction, but this phase is complete and no further construction dredging is expected.

A 12,000 square feet visitor center is under design and scheduled for award in Fiscal Year 1996. This structure will be 100 percent Federally funded. On 30 September 1994 the Acting Assistant Secretary of the Army (CW) sent letters to the Chairmen of the House and Senate Subcommittees on Energy and Water Development of the Committees on Appropriations, informing them of the construction of a facility of this size and scope.

APPROPRIATION TITLE: Construction General - Locks and Dams (Navigation)

PROJECT: Red River Waterway - Mississippi River to Shreveport, Louisiana (Continuing)

LOCATION: The project is located in central and northwest Louisiana and will provide a navigation route from the Mississippi River at its juncture with Old River via Old and Red Rivers to Shreveport, LA.

DESCRIPTION: The project provides for a 9- by 200-foot navigation channel extending about 236 miles from the Mississippi River through Old River and Red River to the vicinity of Shreveport. Five locks with dimensions of 84 by 685 by 14 feet and adjacent dams will provide a lift of about 141 feet. The project also provides for realigning the banks by means of dredging, cutoffs, and training works and for stabilizing its banks by means of revetments, dikes, and other methods. Recreation facilities and fish and wildlife development are also an integral part of the project. The major unprogrammed work includes recreation sites and acquisition of a portion of mitigation lands. This project is part of the Red River Waterway, Louisiana, Texas, Arkansas, and Oklahoma, which also includes the Shreveport, LA, to Daingerfield, TX (navigation), Shreveport, LA, to Index, AR (bank stabilization), and Index, AR, to Denison Dam (bank stabilization) reaches.

AUTHORIZATION: River and Harbor Act of 1968, Water Resources Development Act of 1976, Supplemental Appropriations Act of 1984, Water Resources Development Acts of 1986, 1988, 1990, and 1992, and Energy and Water Development Appropriations Act of 1994.

REMAINING BENEFIT - REMAINING COST RATIO: 12.4 to 1 at 3-1/4 percent.

TOTAL BENEFIT-COST RATIO: 1.4 to 1 at 3-1/4 percent.

INITIAL BENEFIT-COST RATIO: 1.2 to 1 at 3-1/4 percent (FY 1973).

BASIS OF BENEFIT-COST RATIO: Benefits are from the General Reevaluation Report and Final Supplement No. 2 to the Environmental Impact Statement, at 1982 price levels, approved 4 January 1984. Costs for current analysis are based on October 1994 costs deflated to October 1982 price levels.

SUMMARIZED FINANCIAL DATA				ACCUM. PCT. OF EST. FED. COST
Estimated Apprn Requirement (Corps)			$1,726,416,000	
Programmed Construction		$1,677,012,000		
Unprogrammed Construction		49,404,000		
Estimated Apprn Requirements (U.S. Coast Guard)			359,000	
Programmed Construction		0		
Unprogrammed Construction		359,000		
Estimated Total Apprn Requirement			1,726,775,000	
Programmed Construction		1,677,012,000		
Unprogrammed Construction		49,763,000		
Estimated Non-Federal Cost			97,950,000	
Programmed Construction		36,965,000		
Cash Contribution	$ 8,270,000			
Other Costs	28,695,000			
Unprogrammed Construction		60,985,000		
Cash Contribution	43,489,000			
Other Costs	17,496,000			
Total Estimated Programmed Construction Cost			$1,713,977,000	
Total Estimated Unprogrammed Construction Cost			110,748,000	
Total Estimated Project Cost			1,824,725,000[2]	
Allocations to 30 September 1994			1,609,370,000	
Conference Allowance for FY 1995			36,782,000	
Allocations for FY 1995			30,960,000[3]	
Allocations through FY 1995			1,640,330,000[2]	95
Allocation Requested for FY 1996			16,673,000	96
Programmed Balance to Complete After FY 1996			20,009,000	
Unprogrammed Balance to Complete After FY 1996			49,404,000	

STATUS (1 January 1995)	PERCENT COMPLETE	PHYSICAL COMPLETION SCHEDULE
Entire Project	90	Indefinite
Open to 9-Foot Navigation		
Lindy Boggs Lock & Dam		Dec 1987
John H. Overton Lock and Dam		Dec 1987
Lock and Dam No. 3		Dec 1991[1]
Lock and Dam No. 4		Dec 1994
Joe D. Waggonner, Jr., Lock and Dam		Dec 1994

PHYSICAL DATA

Lands and Damages: 26,000 acres, mitigation of wildlife losses above mile 104

Channels and Canals: Channel 9 feet deep, 200 feet wide, and 236 miles long from Old River to Shreveport, LA. Total length of bank protection - 273 miles

Locks: Number - 5; Size - 84 by 685 feet

Dams: Number - 5; Type - Tainter Gated

Relocations: Roads (Modify one bridge)
Railroads (Replace one and modify one bridge)

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[1] Initial interim pool impounded.

[2] Includes $26,654,000 for Overton-Red River Waterway and $21,653,000 for Red River Emergency Bank Protection for construction work.

[3] Reflects $5,822,000 reduction assigned as savings and slippage.

JUSTIFICATION: In its present state, the Red River is a very erratic river subject to wide fluctuations in stage and meandering because of the erodible soils. For navigation to be a reality on Red River, a system of dependable pools and a properly aligned channel are necessary. The pools will be provided by locks and dams, and the proper alignment will be provided by bank and channel stabilization works. Dredged material disposal sites for construction and maintenance will be within the limits of the river bank or areas furnished by local interests at no cost to the United States. These works also will preserve lands and improvements along the navigation route. With preproject open river conditions, the controlling depths for navigation from January to July are 9 feet from the Mississippi River to the mouth of the Black River, 6 feet from the mouth of the Black River to Alexandria, LA, and 5 feet to Shreveport, LA. During the remainder of the year, controlling depths are generally about 9 feet from the Mississippi River to the mouth of the Black River, about 4 feet from there to Alexandria, and 1 to 2 feet to Shreveport.

Navigation from the Mississippi River to Shreveport will provide an artery for low-cost transportation which will stimulate economic growth of the region. Estimated savings are based on an average annual movement of 7,845,000 tons. The average waterborne commerce tonnage experienced during the 10-year period from 1980 to 1989 in the lower 35 miles of the waterway is 2,311,200 tons. Commodities to be carried over the waterway include iron and steel products and pipe, industrial chemicals, paper and allied paper products, petroleum and petroleum products, other metals and ores, sulphur, agricultural chemicals, and grain. The public will realize an average annual savings of $68,831,000 which will result from reduced transportation costs. Several local entities are actively involved in port development on the waterway. The city of Alexandria has constructed port facilities for use by industry and the Caddo-Bossier Port Commission has done extensive planning, engineering, and design of port facilities at Rothschild Realignment in Pool 5. The Caddo-Bossier Port Commission has also acquired lands for the port site and has construction of initial facilities underway. The Port Commission of Natchitoches Parish has also investigated possible port sites. These ports would be able to accommodate tows or barges of various sizes. The usable lock dimensions were designed for a configuration of six barges with individual dimensions of 35 by 195 feet and a towboat. Larger grain and petroleum barges can also be expected to call at the ports. The project is credited with benefits derived from transportation savings from use of the waterway, flood control, damages prevented by bank stabilization, security against levee crevasses, fish and wildlife, recreation, area redevelopment, reduced maintenance on existing revetments, reduced sedimentation, irrigation, reduced costs of municipal and industrial water supply, and reduced pumping costs. The average annual benefits are as follows:

Annual Benefits	Amount
Navigation	$ 68,831,000
Flood Control	2,037,000
Bank Stabilization	16,602,000
Fish and Wildlife	460,000
Recreation	4,435,000
Area Redevelopment	14,808,000
Other:	
Irrigation and reduced costs of municipal and industrial water supply	53,000
Total Annual Benefits	$107,226,000

FISCAL YEAR 1996: The requested amount will be applied as follows:

Pool 1	
Planning, Engineering, and Design	$ 305,000
Subtotal Pool 1	$ 305,000
Pool 2	
Planning, Engineering, and Design	423,000
Subtotal Pool 2	$ 423,000
Pool 3	
Initiate:	
Shell Point Structure	605,000
Complete	
St. Maurice Capout	960,000
Kadesh Capout	3,012,000
Miscellaneous Hired Labor	25,000
Planning, Engineering, and Design	666,000
Construction Management	391,000
Subtotal Pool 3	$5,659,000
Pool 4	
Initiate and Complete:	
Coushatta Boat-Launch Facility Comfort Station	$ 35,000
Complete:	
Westdale Capout	254,000
Piermont Closure Repair	300,000
Planning, Engineering, and Design	845,000
Construction Management	65,000
Subtotal Pool 4	$1,499,000

Pool 5	
Initiate and Complete:	
Shreveport/Bossier City Boat-Launch Facility Comfort Stations	$ 70,000
McDade Capout	2,314,000
Complete:	
Cecile Capout	1,965,000
Moss Capout	951,000
Curtis Capout	1,315,000
Elm Grove Capout	832,000
Planning, Engineering, and Design	760,000
Construction Management	506,000
Subtotal Pool 5	$ 8,713,000
Mitigation	
Planning, Engineering, and Design	$ 74,000
Subtotal Mitigation	$ 74,000
GRAND TOTAL	$16,673,000

NON-FEDERAL COST: With the exception of the LA-AR Railroad Bridge Relocation and the mitigation element, local interests are required to provide all lands, easements, and rights-of-way, including a proportionate share of the cost of the bridge relocations over existing channels in accordance with the principles of Section 6 of the Bridge Alteration Act (Truman-Hobbs) of 21 June 1940, as amended by the Act of 16 July 1952, 25 percent of the cost of necessary retaining dikes for dredged materials and 50 percent of the total cost of recreation facilities. Non-Federal costs associated with the total project are broken down as follows. The non-Federal sponsor must comply with the requirements listed below:

Requirements of Local Cooperation	Payments During Construction and Reimbursements	Annual Operation, Maintenance, Repair, Rehabilitation, and Replacement Costs
Provide lands, easements, rights-of-way, and dredged material disposal areas	$36,506,000	
Modify or relocate utilities, roads, bridges (except railroad bridges), and other facilities, where necessary for the construction of the project	9,685,000	$ 211,700
Pay one-half of the separable costs allocated to recreation (except recreational navigation) and bear all costs of operation, maintenance, repair, rehabilitation, and replacement of recreation facilities	48,125,000	1,448,000
Pay 6 percent of the first costs allocated to fish and wildlife and pay 6 percent of the costs of operation, maintenance, repair, rehabilitation, and replacement of fish and wildlife facilities	475,000[1]	333,800[2]
Pay 25 percent of the first cost allocated to retention dikes required for construction and maintenance dredging	2,062,000	31,200
Replacement costs		302,900
Total Non-Federal Costs	$97,950,000	$2,327,600

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[1] Since the local sponsor will assume all operation and maintenance costs and this cost will exceed the 6 percent local share, there will be no local requirement toward implementation costs for Loggy Bayou increment. Implementation costs shown are for the Bayou Bodcau increment.

[2] 100 percent of annual management costs.

The non-Federal sponsor has also agreed to make all required payments concurrently with project construction. Non-Federal cost associated with the scheduled portion of the project are broken down as follows:

Lands and Damages	$19,010,000
Utility Relocations	9,685,000
Cash Contribution:	8,270,000
Recreation Facilities	(5,131,000)
Bridge Relocations	(1,050,000)
Retaining Dikes	(2,029,000)
Mitigation	(60,000)
Total	$36,965,000

STATUS OF LOCAL COOPERATION: Formal assurances of local cooperation were furnished by the Red River Waterway Commission on 26 February 1969 and accepted on behalf of the United States on 15 April 1969. That agency was formed expressly to provide the local cooperation required for the project and has levied a 2-mill assessment to fulfill its obligations. Amended assurances covering the provisions of the Uniform Relocations Assistance and Real Property Acquisition Policies Act of 1970, Public Law 91-646, and the specific written agreement requirements of Section 221 of the Flood Control Act of 1970, Public Law 91-611, were executed by the Red River Waterway Commission on 23 May 1973 and were accepted on behalf of the United States on 14 November 1973. A cost sharing agreement covering nine recreation sites in Pools 1 and 2 was approved by the Deputy Chief of Engineers on 23 July 1985. A Memorandum of Understanding between the Corps and the local sponsor for development of these nine sites was executed in January 1986. A supplement to this cost-sharing agreement was executed in the last quarter of FY 1994 to cover the advance construction of three boat ramps and ancillary facilities in Pools 4 and 5 in FY 1995. In the Conference Report that accompanied the Energy and Water Development Appropriations Act of FY 1993, Congress directed the Corps of Engineers to prepare a supplement to the recreation master plan to serve as the project document to support the contract for recreation development in Pools 3-5. The Red River Waterway Commission agreed by letter dated 6 September 1983 to fulfill all responsibilities of the local sponsor relative to the purchase of wildlife mitigation lands. The Louisiana Department of Wildlife and Fisheries, by letter dated 22 July 1983, agreed to assume operation and maintenance responsibilities for acquired wildlife mitigation lands. Updated letters of agreement covering the mitigation plan as presently conceived (i.e., acquisition of up to 5,000 acres in the vicinity of Loggy Bayou) were furnished by the Red River Waterway Commission and the Louisiana Department of Wildlife and Fisheries on 13 August 1990 and 17 August 1990, respectively. The Red River Waterway Commission also furnished a letter of agreement to support the Bayou Bodcau mitigation increment subject to certain conditions on 9 September 1992.

All conditions with the exception of one had been resolved prior to passage of the Energy and Water Development Appropriations Act of 1994. Passage of the Act resolved this last condition, which involves how the costs for the Federal share of operation and maintenance undertaken by the Red River Waterway Commission will be treated by authorizing annual reimbursement in lieu of crediting. The Local Cooperation Agreement between the Federal Government and the State of Louisiana for the acquisition of up to 5,000 acres of mitigation lands in the vicinity of Stumpy Lake/Swan Lake/Loggy Bayou Wildlife Management Area was executed by the Red River Waterway Commission in May 1993 and by the Assistant Secretary of the Army in June 1993. Since all Red River Waterway Commission conditions have now been satisfactorily resolved, preparation of a Project Cooperation Agreement, which will cover the acquisition of mitigation lands in the vicinity of the Bayou Bodcau Wildlife Management Area, has been reinitiated in accordance with the FY 1992

Energy and Water Development Appropriations Act. Pool 3 will require new structural features at Nantachie Lake so that the lake can continue to be drawn down subsequent to final pool impoundment. As a result, the Red River Waterway Commission was requested to agree to accept operation and maintenance responsibilities for the new Nantachie Lake drawdown structure and to agree to provide amended assurances of local cooperation to this effect in December 1993. At the same time, they were also requested to agree to accept responsibility for related modification or replacement of bayou crossings downstream of Nantachie Lake. The sponsor has not yet agreed to accept responsibility related to the bayou crossings.

The Red River Waterway Commission is providing its share of the project first costs by furnishing the necessary lands, easements, and rights-of-way, performing utility relocations as needed, and providing cash contributions for recreation facilities, bridge relocations, and retaining dikes. They will contribute their share of retention dike construction for maintenance dredging by cash contribution and they will provide the lands, easements, and rights-of-way for these dikes.

COMPARISON OF FEDERAL COST ESTIMATES: The current Federal (Corps of Engineers) cost estimate of $1,726,416,000 is a decrease of $372,000 from the latest estimate ($1,726,788,000) presented to Congress (FY 1995). This change includes the following items.

Item	Amount
Price Escalation on Construction Features	$-372,000
Total	$-372,000

STATUS OF ENVIRONMENTAL IMPACT STATEMENT: The final statement was filed with CEQ on 11 May 1973. The Environmental Impact Statement is included in the project "Red River Waterway." Supplement No. 1 to the Environmental Impact Statement was prepared for the Mississippi River to Shreveport reach of the Red River Waterway due to a change in project alignment from the authorizing document, and to include updated environmental information due to a reanalysis and to include results of the ground-water studies. The final Supplement No. 1 was filed with CEQ on 18 February 1977, and published in the Federal Register on 25 February 1977. A third Environmental Impact Statement (Supplement No. 2) was submitted to the Environmental Protection Agency in final form on 10 November 1983, and the record of decision was signed by the Division Engineer on 4 January 1984. This supplement was necessary to document the expanding base of data and design information being developed and accompanied the General Reevaluation Report.

An Environmental Assessment (EA) was prepared for Pool No. 2 to present the results of investigations of the impacts of the 58- and 64-foot elevations. The EA resulted in a Finding of No Significant Impact (FONSI) which allowed a design change from 58- to 64-foot pool elevations. Following review by the public, the FONSI was signed on 21 April 1982.

An EA of the Loggy Bayou Area mitigation increment has been performed. This area was not included in the original mitigation report. The EA was required to satisfy the National Environmental Policy Act. The EA resulted in a FONSI, which was signed 11 January 1993. EA's are required to present the impacts associated with the construction of riverside levee protection berms in Pools 3 and 5. The berms are necessary to ensure the integrity of the existing flood control levee system. The EA for the berms in Pool 3 resulted in a FONSI, which was signed on 16 July 1992. The EA for the berms in Pool 5 also resulted in a FONSI which was signed on 24 May 1993.

EA's are also required for the Bayou Bodcau mitigation increment and the Nantachie Lake drawdown structure to satisfy NEPA requirements. The Bayou Bodcau mitigation EA is currently scheduled to be completed by the end of the first quarter of FY 1995, and the Nantachie Lake drawdown structure EA is tentatively scheduled to be completed by the end of the second quarter of FY 1995.

OTHER INFORMATION: Funds to initiate preconstruction engineering and design were appropriated in FY 1971 and allotted in FY 1972. Funds to initiate construction were appropriated in FY 1973.

The Water Resources Development Act of 1986, as modified by the Water Resources Development Acts of 1988 and 1990 and the FY 1990 and FY 1994 Energy and Water Development Appropriation Acts, authorized the wildlife mitigation project for the waterway above mile 104 to Shreveport, LA, at a total cost of $9,420,000. The Water Resources Development Act of 1990 modifies the mitigation project by authorizing the Secretary of the Army to acquire an additional 12,000 acres adjacent to or close to the Bayou Bodcau Wildlife Management Area. The real estate design memorandums, which present the real estate requirements for the Loggy Bayou area and Bayou Bodcau area mitigation lands, have been approved. The Chief of Engineers report on mitigation was returned unendorsed to the Secretary of the Army by OMB because it does not clearly demonstrate compliance with the Administration's policy on mitigation. A supplemental report which provides the requested information required to demonstrate compliance has been submitted to the Assistant Secretary of the Army. The supplemental report, which was submitted prior to passage of the FY 90 Energy and Water Development Appropriations Act and the Water Resources Development Act of 1990, recommends the acquisition of only 300 acres in the Stumpy Lake area and no lands in the vicinity of the Bayou Bodcau Wildlife Management Area. The Energy and Water Development Appropriation Act of 1994 directed the annual reimbursement to the project's local sponsor for the Federal share of management costs for the Bayou Bodcau mitigation area.

APPROPRIATION TITLE: Construction, General - Local Protection - (Flood Control)

PROJECT: East St. Louis, Illinois (Continuing)

LOCATION: The project is located in St. Clair and Madison Counties, Illinois along the left bank of the Mississippi River between river miles 175 and 195 above the Ohio River.

DESCRIPTION: The project consists of rehabilitation of 21 small gravity drains, 10 large gravity drains (gatewells), 20 closure structures, 300 relief wells, minor floodwall and levee rehabilitation work, rehabilitation of 13 pumping stations and 3 drainage control structures, and 6 segments of channel rehabilitation, and replacement of 3 bridge structures and abandonment and removal of 3 bridge structures. All work, except bridges, is programmed. The bridge work, which is unprogrammed will be performed at 100 percent non-Federal cost.

AUTHORIZATION: Energy and Water Development Appropriation Act of 1988 (PL 100-202).

REMAINING BENEFIT-REMAINING COST RATIO: 25.9 to 1 at 8 5/8 percent.

TOTAL BENEFIT-COST RATIO: 8.7 to 1 at 8 5/8 percent.

INITIAL BENEFIT - COST RATIO: 14.0 to 1 at 8 5/8 percent (FY 1988).

BASIS OF BENEFIT-COST RATIO: Based on information presented in the General Design Memorandum, at October 1994 price levels.

SUMMARIZED FINANCIAL DATA				ACCUM PCT OF EST FED COST
Estimated Federal Cost			$28,700,000	
Programmed Construction		$28,700,000		
Unprogrammed Construction		0		
Estimated Non-Federal Cost			12,300,000	
Programmed Construction		9,424,000		
Cash Contributions	6,635,000			
Other Costs	2,789,000			
Estimated Non-Federal Cost				
Unprogrammed Construction		2,876,000		
Other Cost	2,876,000			
Total Estimated Programmed Construction Cost			38,124,000	
Total Estimated Unprogrammed Construction Cost			2,876,000	
Total Estimated Project Cost			41,000,000	
Allocations to 30 September 1994			16,416,000	
Conference Allowance for FY 1995			3,200,000	
Allocation for FY 1995			2,694,000[1]	
Allocations through FY 1995			19,110,000	67
Allocation Requested for FY 1996			3,700,000	79
Programmed Balance to Complete after FY 1996			5,890,000	
Unprogrammed Balance to Complete after FY 1996			0	

STATUS (1 January 1995)	PERCENT COMPLETE	PHYSICAL COMPLETION SCHEDULE
Entire Project	46	Sep 1997

PHYSICAL DATA

Small Gravity Drains	21
Large Gravity Drains	10
Closure Structures	20
Relief Wells	300
Floodwall & Levee Work	Minor
Pumping Stations	13
Drainage Control Structures	3
Bridge Replacements	3
Bridge Abandonment/& Removal	3
Channels	6 segments

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[1] Reflects $506,000 reduction assigned as Savings and Slippage.

Lower Mississippi Valley Division St. Louis District East St. Louis, Illinois
6 February 1995

JUSTIFICATION: The original project, authorized by the Flood Control Act of 1936, provides protection for 85,000 acres of business, industrial and residential areas, including East St. Louis, Granite City, Madison, Venice, Brooklyn, Fairmont and Sauget, Illinois. Urban design flood protection is provided for a Mississippi River flood stage of 52 feet on the St. Louis, Market Street gage. The rehabilitation project was authorized by the Energy and Water Development Appropriations Act of 1988. As a result of failure of a deteriorated roller gate, localized flooding occurred in 1986 causing the evacuation of 1200 persons and an estimated $35,000,000 in damages. The need for extensive rehabilitation work was verified during preparation of a General Design Memorandum for the project during FY 1990. The extensive rehabilitation work needed is the result of several decades of deferral of needed project maintenance due to the limited financial capability of the local sponsor, Metro East Sanitary District (MESD). A tax referendum, which was passed in February 1989, will provide MESD with increased tax revenue necessary to cost share in the rehabilitation project and to perform the necessary maintenance of the project after the rehabilitation is completed. The average annual benefits, all flood control, are $30,159,000.

FISCAL YEAR 1996: The requested amount of $3,700,000 will be applied as follows:

Initiate and Complete:	
Horseshoe Lake Gravity Drain	$ 233,000
Remaining Small Gravity Drains	382,000
Granite City No. 1, 2, 3, IR-8, Phillips Reach Pumping Stations	480,000
Structural & Architectural Rehab of Pumping Stations	277,000
Complete:	
Rehabilitate Closure Structures	25,000
Closure Structures C-16, C-23, & C-24	17,000
Closure Structure C-13	41,000
East St. Louis Sewer Rehabilitation	1,000
Phase 2 Relief Well Rehabilitation	489,000
Planning, Engineering and Design	972,000
Supervision & Administration	783,000
Total	$3,700,000

NON-FEDERAL COST: In accordance with the cost sharing and financing concepts reflected in the Water Resources Development Act of 1986, the non-Federal sponsor must comply with the requirements listed below.

Requirements of Local Cooperation	Payments During Construction and Reimbursements	Annual Operation, Maintenance, Repair, Rehabilitation, and Replacement Costs
Provide lands, easements, rights-of-way, and dredged material disposal areas.	$ 567,000	
Modify or relocate utilities, roads, bridges (except railroad bridges), and other facilities where necessary for the construction of the project.	2,876,000	
Pay 23.49 percent of the costs allocated to flood control to bring the total non-Federal share of flood control costs to 25 percent, as determined under Section 103 (m) of the Water Resources Development Act of 1986, to reflect the non-Federal sponsor's ability to pay for credit allowed based on Section 215 of the Flood Control Act of 1968.	8,857,000	
Total Non-Federal Costs	$12,300,000	

Local interests are also required to operate and maintain all works after completion.

STATUS OF LOCAL COOPERATION: The local sponsor, the Metro East Sanitary District, is strongly supportive of the project. A tax referendum to provide sufficient funds for local sponsorship of the project was passed in February 1989. Four Project Cooperation Agreements will be utilized for this project. The Project Cooperation Agreement for the first construction item was executed in November 1989. The second Project Cooperation Agreement was executed on 11 December 1990. The third Project Cooperation Agreement was executed on 11 March 1992. An amendment to the Third Project Cooperation Agreement, which provides for the local sponsor to be credited for costs of work-in-kind (Clearing & Excavation of Drainage Channels) was executed on 9 August 1994. A letter of intent is being prepared by the Canteen Creek Drainage District which will serve as the local sponsor for the Canteen Creek portion of the project. The Project Cooperation Agreement is scheduled to be executed in October 1996.

COMPARISON OF FEDERAL COST ESTIMATES: The current Federal (Corps of Engineers) cost estimate of $28,700,000 is an increase of $1,600,000 from the latest estimate ($27,100,000) presented to Congress (FY 1995). This change includes the following items:

Item	Amount
Price Escalation on Construction Features	$ +199,000
Post Contract Award and Other Estimating Adjustments (Including contingency adjustments)	+1,401,000
Total	$+1,600,000

STATUS OF ENVIRONMENTAL IMPACT STATEMENT: The project consists of rehabilitation of existing facilities and, for the major part of the project, will not affect environmental conditions except for short-term localized impacts. An environmental assessment has been prepared for items to be rehabilitated under each of the three local cost sharing agreements that will be used to complete this project.

OTHER INFORMATION: Funds to initiate construction were appropriated in FY 1989. The scheduled completion date of September 1997 for programmed work is a slippage from the latest completion date of September 1996 presented to Congress. This change is due to the development of a more realistic schedule to incorporate delays resulting from the 1993 flood and recovery.

APPROPRIATION TITLE: Construction, General - Local Protection (Flood Control)

PROJECT: Aloha-Rigolette, Louisiana (Continuing)

LOCATION: The project is located in north-central Louisiana between the towns of Winnfield and Pineville on the left descending bank of the Red River.

DESCRIPTION: The recommended plan consists of a three-barrel floodgate structure installed at the mouth of Bayou Darrow to reopen it to the Red River, 8.2 miles of clearing and snagging of Bayou Darrow from its mouth upstream, construction of a closure and low-flow structure on Bayou Rigolette just below its junction with Bayou Darrow, and realignment of Sam's Bayou and appropriate mitigation features. All work is programmed.

AUTHORIZATION: Water Resources Development Act of 1990.

REMAINING BENEFIT-REMAINING COST RATIO: 1.2 to 1 at 8-1/2 percent.

TOTAL BENEFIT-COST RATIO: 1.3 to 1 at 8-1/2 percent.

INITIAL BENEFIT-COST RATIO: 1.2 to 1 at 8-7/8 percent (FY 1989).

BASIS OF BENEFIT-COST RATIO: Benefits are from Aloha-Rigolette Area, Louisiana, Feasibility Study Final Report, June 1988; approved 11 April 1990 at 1988 price levels. Costs are based on October 1994 prices deflated to October 1988 price levels.

SUMMARIZED FINANCIAL DATA			STATUS (1 January 1995)	PERCENT COMPLETE	PHYSICAL COMPLETION SCHEDULE
Estimated Federal Cost		$7,078,000	Entire Project	0	Being Determined
Estimated Non-Federal Cost		2,359,000			
Cash Contribution	$1,885,000				
Other Costs	474,000				
Total Estimated Project Cost		$9,437,000			

SUMMARIZED FINANCIAL DATA (Cont)		ACCUM. PCT. OF EST. FED. COST
Allocations to 30 September 1994	$ 2,081,000	
Conference Allowance for FY 1995	200,000	
Allocation for FY 1995	168,000 [1]	
Allocations through FY 1995	2,249,000	32
Allocation Requested for FY 1996	2,379,000	65
Programmed Balance to Complete		
After FY 1996	2,450,000	
Unprogrammed Balance to Complete after FY 1996	0	

PHYSICAL DATA

Channels and Canals: 8.2 miles of clearing and snagging
Floodgates: Three 10- by 10-foot by 190 feet long
Closure and Low-Flow Structure on Bayou Rigolette

Realignment of Sam's Bayou
Mitigation: 542 acres - Reforestation
397 acres - Overwintering waterfowl habitat
308 acres - Flowage easement below Iatt Lake

JUSTIFICATION: In the mid-1950's, flood control improvements were constructed consisting of a levee along the Red River and two 10- by 10-foot culverts with floodgates in the levee at the mouth of Bayou Rigolette to prevent flood damages. The floodgates serve as the only means of evacuating water from the Basin. Since the mid-1950's, agricultural development in the Basin has increased dramatically; therefore, the amount of rainfall runoff has increased. The streams in the area and the existing floodgates are now overtaxed by Basin runoff. Consequently, runoff from moderate floods, such as those which occur every 2 to 3 years, causes streambank overflow in the alluvial plain and the headwater ponding at the floodgates. On an average annual basis, approximately 6,496 acres of cleared land are flooded. The average annual acres flooded are reduced 78 percent with the recommended plan. The average annual benefits, all flood control, are $1,044,000 based on October 1988 price levels.

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[1] Reflects reduction of $32,000 assigned as savings and slippage.

FISCAL YEAR 1996: The requested amount will be applied as follows:

Initiate:	
Channels, Item 3	$ 79,000
Bayou Darrow, Item 1	985,000
Bayou Rigolette, Item 2	602,000
Continue:	
Mitigation, Item 4	345,000
PED	49,000
Supervision and Administration	319,000
Total	$2,379,000

NON-FEDERAL COSTS: In accordance with the cost-sharing and financing concepts reflected in the Water Resources Development Act of 1986, the non-Federal sponsor must comply with the requirements listed below:

Requirements of Local Cooperation	Payments During Construction and Reimbursements	Annual Operation, Maintenance, Repair, Rehabilitation, and Replacement Costs
Provide lands, easements, rights-of-way, and dredged material disposal areas.	$ 474,000	
Modify or relocate utilities, roads, bridges (except railroad bridges), and other facilities, where necessary for the construction of the project.	0	
Pay 5 percent of the costs allocated to flood control to bring the total non-Federal share of flood control and mitigation costs to 25 percent and bear all costs and responsibilities for operation, maintenance, repair, rehabilitation, and replacement of flood control and mitigation facilities.	1,885,000	$27,000
Total Non Federal Costs	$2,359,000	$27,000

The non-Federal sponsor has agreed to provide all lands, easements, rights-of way, and relocations necessary for project construction, make all required payments concurrently with project construction, and bear all cost and responsibility associated with operation and maintenance, repair, rehabilitation, and replacement over the life of the project.

STATUS OF LOCAL COOPERATION: The city of Colfax, Louisiana, has agreed to cost share this project. The Project Cooperation Agreement was executed 19 September 1994.

COMPARISON OF FEDERAL COST ESTIMATES: The current Federal (Corps of Engineers) cost estimate of $7,078,000 is the same as last presented to Congress (FY 1995).

STATUS OF ENVIRONMENTAL IMPACT STATEMENT: The Final Environmental Impact Statement was filed with the Environmental Protection Agency and listed on the Federal Register on 17 November 1989.

OTHER INFORMATION: Funds to initiate preconstruction engineering and design were appropriated in FY 1990, and funds to initiate construction were appropriated in FY 1992.

APPROPRIATION TITLE: Construction General - Local Protection (Flood Control)

PROJECT: Lake Pontchartrain, Louisiana, and Vicinity (Hurricane Protection)(Continuing)

LOCATION: The project is located in St. Charles, Jefferson, Orleans, St. Bernard, and St. Tammany Parishes in southeast Louisiana in the general vicinity of New Orleans adjacent to Lake Pontchartrain.

DESCRIPTION: The recommended plan consists of a new levee north of US HWY 61, from the Jefferson-St. Charles Parish boundary to the east Bonnet Carré Spillway guide levee; a floodwall along the Jefferson-St. Charles parish line; an enlarged levee along the Jefferson Parish lakefront; an enlarged New Orleans lakefront levee landward of the seawall including parallel flood protection on the 17th Street, Orleans Avenue, and London Avenue outfall canals; a new and enlarged levee and floodwall along both sides of the Inner Harbor Navigation Canal (IHNC); a new levee and floodwall along the lakefront from the airport to South Point; an enlarged levee from South Point to the Gulf Intracoastal Waterway (GIWW); an enlarged levee and new floodwall along the north of the Mississippi River-Gulf Outlet (MR-GO) and GIWW; a new levee in the Chalmette area from the IHNC levee along the south bank of the MR-GO to approximately 2-1/2 miles northwest of Verret and west to the Mississippi River levee near Caernarvon; a strengthened Mandeville seawall on the north shore at present height; and a new pumping station and vertical lift gates for the Florida Avenue Complex. The parallel protection work for Orleans and London Avenue outfall canals is unprogrammed after FY 1995.

AUTHORIZATION: Flood Control Act of 1965; Water Resources Development Acts of 1974, 1986, 1990, and 1992.

REMAINING BENEFIT TO REMAINING COST RATIO: 3.9 to 1 at 3 1/8 percent.

TOTAL BENEFIT - COST RATIO: 3.0 to 1 at 3 1/8 percent.

INITIAL BENEFIT-COST RATIO: 17.6 to 1 at 3-1/8 percent (FY 1967).

BASIS OF BENEFIT - COST RATIO: Benefits are from the latest available evaluation dated December 1982 at 1981 price levels.

SUMMARIZED FINANCIAL DATA

Estimated Total Appropriation Requirement			$515,000,000	
Programmed Construction		$490,146,000		
Unprogrammed Construction		24,854,000		
Future Non-Federal Reimbursement			7,000,000	
Programmed Construction		7,000,000		
Unprogrammed Construction		0		
Estimated Federal Cost (Ultimate)			508,000,000	
Programmed Construction		483,146,000		
Unprogrammed Construction		24,854,000		
Estimated Non-Federal Cost			214,000,000	
Programmed Construction		210,358,000		
Cash Contribution	$ 62,983,000			
Other Costs	140,375,000			
Reimbursements:				
Hurricane Protection	7,000,000			
Unprogrammed Construction		3,642,000		
Cash Contribution	3,642,000			
Other Costs	0			
Reimbursements	0			
Total Estimated Programmed Construction Cost			$693,504,000	
Total Estimated Unprogrammed Construction Cost			28,496,000	
Total Estimated Project Cost			$722,000,000	
Allocations to 30 September 1994			302,849,000	
Conference Allowance for FY 1995			13,300,000	ACCUM. PCT. OF EST. FED. COST
Allocation for FY 1995			13,300,000	
Allocations through FY 1995			316,149,000[4]	
Allocation Requested for FY 1996			7,848,000	
Programmed Balance to Complete after FY 1996			166,149,000	61
Unprogrammed Balance to Complete after FY 1996			24,854,000	63

STATUS: (1 January 1995)	PERCENT COMPLETE	PHYSICAL COMPLETION SCHEDULE
New Orleans East Unit	90	[1]
New Orleans West Unit	12	[1,2]
Mandeville Unit	100	Jun 1994[3]
Chalmette Unit	98	Jan 1997
Entire Project	80	[1]

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[1] Being determined.

[2] Excludes the landside runoff from the Jefferson Parish Lakefront levees that has an indefinite completion date.

[3] Work is being accomplished by the FY 1992 Dire Emergency Supplemental under Appropriation 96x3125, Flood Control and Coastal Emergencies.

[4] Reflects $6,713,000 in programmed carryover into FY 1996.

PHYSICAL DATA

Levees: Average height: 16 feet
Length: 80 miles

Drainage Structures: 9

Dam Closures: 2

Floodwalls: 17.9 miles

Pumping Plant: 1

Floodgates: 2

Control Valve Structures: 3

JUSTIFICATION: The lowlands in the Lake Pontchartrain tidal basin are subject to tidal overflow. The Greater New Orleans Metropolitan Area which lies in this basin will continue its rapid economic development in the future years even though severe damages have resulted from several hurricanes in the past years. Hurricane damages result from surges entering Lake Pontchartrain from Lake Borgne through natural tidal passes at the Rigolets and Chef Menteur Passes and the Inner Harbor Navigation Canal. The surges are intensified by local wind effects and the combination of waves and surges causing overtopping of the pre project protective works along the shores of Lake Pontchartrain. The eastern portion of the area is also subject to flooding by surges and waves that move directly from Lake Borgne and overtop the then existing inadequate protective system seaward of the developed land areas. As a result, residences and industrial and commercial establishments suffer damage, business activities are disrupted, lives are endangered, and hazards to health are created. Hurricanes much more severe than any of record are possible. In the event of the occurrence of such a severe hurricane, catastrophic property damage and loss of human life would be experienced. Local interests have requested protection against these threats to life and property. Hurricane Betsy in September 1965 caused extensive damage and flooding of urban areas of the New Orleans area to depths of up to 10 feet. Hurricane Camille occurred in the project area in August 1969 and flooded areas along the Inner Harbor Navigation Canal. Extensive flooding and overtopping of levees would have occurred in the project area in September 1974 if Hurricane Carmen had continued on its predicted course. In 1985 Hurricane Juan caused extensive flooding in the St. Charles Parish area. The Lake Pontchartrain hurricane protection project will provide protection from similar occurrences. The project will provide protection against flooding from the Standard Project Hurricane (SPH). The average annual benefits, all flood control, are $95,771,000, based on 1 October 1981 prices.

FISCAL YEAR 1996: The total program amount, including the requested and programmed carryover amounts of $7,848,000 and $6,713,000, respectively, will be applied as follows:

NEW ORLEANS EAST UNIT	
Initiate:	
Orleans Marina Ph 4	$ 700,000
Initiate and Complete:	
Floodgate at Hammond Hwy	298,000
Complete:	
17th Str Outfall Canal Bridge	950,000
London Mirabeau-Lee Ctr	1,751,000
Orleans Outfall Ph 2C Har-Fil-Part 1	574,000
Federal Real Estate Support	12,000
Surveys and Layouts	32,000
Planning, Engineering and Design	1,141,000
Supervision and Administration	517,000
Subtotal	$5,975,000
NEW ORLEANS WEST UNIT	
Initiate and Complete:	
Floodgates at Hammond Hwy	325,000
17th St. Canal Bridge	746,000
Jeff Parish Lakefront Levee Drainage	690,000
Continue:	
2nd Enlgt 9-115 Rch 1A & 1B	215,000
Complete:	
Fldwl Sta 464 - 480	50,000
Lv NOA Rch 1A - 1L Cloth & Clay	1,909,000
Fldwl Sta 435 - 438 at Causeway	391,000
Mitigation	1,224,000
Federal Real Estate Support	20,000
Survey and Layouts	40,000
Planning, Engineering and Design	1,256,000
Supervision and Administration	800,000
Subtotal	$7,666,000

CHALMETTE UNIT	
Initiate and Complete:	
Paris Rd/Newport GT FW CAPS	157,000
Bayou Dupre Floodwall Capping	66,000
Complete:	
Sta 945-1113 MRGO-Verret	500,000
Surveys and Layouts	40,000
Planning, Engineering and Design	57,000
Supervision and Administration	100,000
Subtotal	$ 920,000
Total	$14,561,000

NON-FEDERAL COST: In accordance with the cost sharing and financing concepts reflected in the Flood Control Act of 1965, the non-Federal sponsors must comply with the requirements listed below:

Requirements of Local Cooperation	Payments During Construction and Reimbursements	Annual Operation, Maintenance, Repair, Rehabilitation, and Replacement Costs
Provide lands, easements, and right-of-ways, and borrow and excavated or dredged material disposal areas.	$ 43,327,000	-
Accomplish alternations to roads, pipelines, cables, wharves, oil wells, and any other facilities necessary for construction of the project.	20,287,000	-
Pay 30 percent of the total project cost, including the items listed above and a cash contribution or equivalent work specifically undertaken as an integral part of the project after authorization and in accordance with construction schedules as required by the Chief of Engineers, excluding a reimbursement to the Federal Government for costs allocated pursuant to the Water Resources Development Act of 1974.	143,386,000	-
Reimburse the Federal Government for costs allocated pursuant to the Water Resources Development Act of 1974.	7,000,000	-
Pay all costs of operations, maintenance, repair, rehabilitation, and replacements of all features of the project works.		$1,223,000
Total Non-Federal Costs	$214,000,000	$1,223,000

In addition, local interests, through the combined efforts of the State of Louisiana, local levee and drainage districts, and parish police juries, have spent an estimated $25,366,000 between 1930-1963, based on the best cost records available, to improve and maintain the hurricane protection system existing prior to project authorization. Available costs of record are as follows:

Combination of State of Louisiana and Lake Borgne Levee District and Chalmette Back Levee District on the Chalmette Back Levee Protection Systems	$ 4,410,000
Orleans Levee District	12,010,000
Port of New Orleans (levees along Industrial Canal)	924,000
Pontchartrain Levee District	5,022,000
Fourth Drainage District of Jefferson Parish	3,000,000
Total	$25,366,000

A very severe hurricane, "Betsy," occurred in the project area in September 1965, just prior to the authorization of the project in October 1965. Considerable damage was done to many of the existing levees, and local interests immediately instituted an accelerated rehabilitation program, with the view of restoring and strengthening existing protection prior to succeeding hurricane seasons. Any work performed by the non-federal interests after project authorization, that conforms to the project design criteria and alignment, is considered as work-in-kind in lieu of a cash contribution.

STATUS OF LOCAL COOPERATION: Assurances are required for the two independently justified plans.

1. Chalmette Area Plan:

a. Orleans Levee District: New agreements of assurances covering all project cooperation requirements and a deferred payment plan as authorized by the Water Resources Development Act of 1974 were executed on 30 March 1976. These assurances were accepted on behalf of the United States on 7 December 1977.

b. St. Bernard Parish Police Jury and Lake Borgne Basin Levee District: New joint agreements of assurances covering all project cooperation requirements and a deferred payment plan as authorized by the Water Resources Development Act of 1974, were executed on 2 April 1976. These assurances were accepted on behalf of the United States on 7 December 1977.

2. High Level Plan:

a. Orleans Levee District: For the Barrier Plan, new agreements of assurances covering all project cooperation requirements and a deferred payment plan as authorized by the Water Resources Development Act of 1974, were executed on 30 March 1976. These assurances were accepted on behalf of the United States on 7 December 1977. Amended assurances for the High Level Plan were executed by the local sponsor on 29 May 1985, and accepted by the United States on 21 June 1985.

b. St. Tammany Parish: The Louisiana Office of Public Works executed an act of assurance dated 8 November 1976, agreeing to fulfill all project cooperation requirements for that portion of the project in St. Tammany Parish. These assurances were accepted on behalf of the United States on 7 December 1977. Amended assurances for the High Level Plan are required; however, due to failure of the local sponsor to agree to the items of local cooperation, this portion of the project has an indefinite completion date.

c. Pontchartrain Levee District: New agreements of assurances covering all project cooperation requirements and a deferred payment plan as authorized by the Water Resources Development Act of 1974, were executed on 20 September 1976. On 8 November 1976, the Louisiana Office of Public Works agreed to lend financial assistance above $100,000 to the Pontchartrain Levee District for that portion of the Barrier Plan which is the responsibility of that levee district. These assurances were accepted on behalf of the United States on 7 December 1977. Supplemental assurances for the High Level Plan were executed by the Pontchartrain Levee District for the St. Charles Parish portion of the project on 20 April 1987, and accepted on behalf of the United States on 7 August 1987.

d. East Jefferson Levee District: Supplemental assurances for the High Level Plan were executed by the East Jefferson Levee District for the Jefferson Parish portion of the project on 16 January 1987. A financial plan was received on 25 November 1987, and accepted on behalf of the United States on 21 December 1987. These levees were previously the responsibility of the Pontchartrain Levee District.

COMPARISON OF FEDERAL COST ESTIMATE: The current Federal cost estimate of $515,000,000 is an increase of $9,000,000 from the latest estimate ($506,000,000) presented to Congress (FY 1995). This change includes the following items:

Item	Amount
Price Escalation on Construction Features	$+ 7,757,000
Estimating Adjustments	+ 443,000
Additional Functions Added Under General Authority	+ 800,000
Total	$+ 9,000,000

STATUS OF ENVIRONMENTAL IMPACT STATEMENT: The final Environmental Impact Statement was filed with the Council on Environmental Quality on 17 January 1975. By court order dated 30 December 1977, a revised Environmental Impact Statement was ordered. A draft revised Environmental Impact Statement for the High Level Plan and the Reevaluation Report, which documents the proposal to adopt that plan instead of the Barrier Plan, were released to the public and filed with the Environmental Protection Agency on 16 December 1983. The final revised Environmental Impact Statement was filed with the Environmental Protection Agency on 7 December 1984.

OTHER INFORMATION: Funds to initiate preconstruction engineering and design were appropriated in Fiscal Year 1966, and funds to initiate construction were appropriated in Fiscal Year 1967.

Authorizations		Estimated Cost and Year of Price Level
FC Act of 1965 dated 27 October 1965 (PL 89-298) (HD 231/89/1)	A program for protection from hurricane flood levels at New Orleans, LA and surrounding areas by means of levees, floodwalls, control structures, navigation structures, locks, dams and drainage structures.	$56,235,000 (1961)[1]

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[1] This is net cost to the Federal Government. The gross cost is $60,185,000. The difference is $3,950,000, which is capitalized value at 3-1/8 percent interest over 100 years for O&M on Rigolets Lock which is to be contributed by local interests and used by the Federal government for project construction.

Authorizations		Estimated Cost and Year of Price Level
Water Resources Development Act of 1974 dated 7 March 1974 (PL 93-251) Section 92	A modification of the FC Act of 1965 (PL 89-298) to provide that non-Federal public bodies may agree to pay the unpaid balance of the cash payment due with interest, in yearly installments.	
Water Resources Development Act of 1986, dated 17 November 1986 (PL 99-662), Section 805	A modification of the project to include construction of a floodwall with sluice gates or other necessary means to ensure that hurricane-flood protection within Jefferson Parish will be unimpaired as a result of any pumping station constructed by local interests.	$3,500,000 (1985)
Water Resources Development Act of 1990, dated 28 November 1990 (PL 101-640) Section 116(k)	A restudy of and report on project benefits to determine whether or not sponsors have received expected benefits and whether or not there should be a reallocation of costs as a result of any unrealized expected benefits. No non-Federal payment for the St. Bernard Parish portion of project was required during the study period (28 November 1990 - 28 November 1991)	
Water Resources Development Act of 1992, dated 31 October 1992 (PL 102-580) Section 102(j)(2)	A reevaluation of the reallocation of project cost based on the benefit study required by the WRDA 1990 Sec. 116K	
Water Resources Development Act of 1992, dated 31 October 1992 (PL 102-580) Section 102(j)(1)	A modification to the project to include conveying landsite runoff from the Jefferson Parish Lakefront levee from the levee right-of-way to the street drainage system.	

APPROPRIATION TITLE: Construction General - Local Protection (Flood Control)

PROJECT: Larose to Golden Meadow, Louisiana (Hurricane Protection) (Continuing)

LOCATION: The project is located in Lafourche Parish, Louisiana, about 28 miles southwest of New Orleans and about 25 miles inland from the Gulf of Mexico along Bayou Lafourche, south of the Gulf Intracoastal Waterway, extending from Larose to Golden Meadow, a distance of about 16 miles.

DESCRIPTION: The project consists of a ring levee approximately 40 miles in length encircling the areas along Bayou Lafourche from Larose to Golden Meadow and extending approximately 9,800 feet from each side of the bayou. Enlargement of about 3 miles of the existing levee at Golden Meadow and construction of floodgates on Bayou Lafourche at the upper and lower limits of the protection system would be used for navigation and hurricane protection purposes. Approximately 8 miles of low interior levees and eight multi-barrelled culverts controlled by flap gates are needed to regulate intercepted drainage. All of the project work is programmed.

AUTHORIZATION: Flood Control Act of 1965.

REMAINING BENEFIT - REMAINING COST RATIO: 20.0 to 1 at 3-1/4 percent.

TOTAL BENEFIT - COST RATIO: 1.9 to 1 at 3-1/4 percent.

INITIAL BENEFIT - COST RATIO: 1.4 to 1 at 3-1/4 percent (FY 1972).

BASIS OF BENEFIT - COST RATIO: Benefits are based on General Design Memorandum Number 1, and Supplement Number 1, approved 18 May 1973 at 1971 price levels.

SUMMARIZED FINANCIAL DATA			ACCUM. PCT. OF EST. FED COST	STATUS (1 January 1995)	PERCENT COMPLETE	PHYSICAL COMPLETION SCHEDULE
Estimated Federal Cost		$ 79,100,000		Entire Project	84	Being Determined
Estimated Non-Federal Cost		33,900,000				
Cash Contribution	$ 7,125,000					
Other	26,775,000					
Total Estimated Project Cost		$113,000,000				
Allocations to 30 September 1994		66,003,000				
Conference Allowance for FY 1995		1,711,000				
Allocation for FY 1995		1,900,000 [1]				
Allocations through FY 1995		67,903,000	86			
Allocation Requested for FY 1996		1,440,000	88			
Programmed Balance to Complete after FY 1996		9,757,000				
Unprogrammed Balance to Complete after FY 1996		0				

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[1] Reflects $271,000 reduction assigned as savings and slippage, $460,000 reprogrammed to the project, and $168,000 in programmed carryover into FY 1996.

PHYSICAL DATA

Levees	Floodgates	Drainage Structures
Loop levee approximately 40 miles in length along both banks of Bayou Lafourche; enlargement of three miles of levees at Golden Meadow; eight miles of low interior levee to regulate intercepted drainage.	Two	Eight multibarreled culverts

JUSTIFICATION: The project area is of great economic importance to the State of Louisiana, and includes lands and improvements having an aggregate value of approximately $193,715,000 (1993 prices). The population of the area was 20,000 in 1980 and has increased steadily. While oil and gas production, commercial fisheries, and related service industries dominate the economy of the area, there is a wide spectrum of economic activity.

Situated within a region of high hurricane incidence (on the average, two hurricanes threaten the Louisiana coast every three years), the project area is highly vulnerable to overflow from the tidal surges which accompany hurricanes. The highest flood stage during the hurricane of 1915 was 5.5 feet at Golden Meadow, taken from a high-water mark. Should a hurricane similar to that of 1915 move through the area, damages of approximately $10,414,000 (1993 prices) could be expected. Hurricane Juan (1985) was accompanied by flooding of 6.6 feet, as recorded on the Leeville gauge. Damages sustained during Hurricane Juan were $35,000,000 and at current prices (1993), $42,624,000. The flood duration was from two days to one week. Damages began at 3 feet, with significant damages at 4.5 feet. Should a major hurricane approaching the standard project hurricane in intensity move through the area, the entire project area would be submerged in the tidal surge and monetary damages would likely amount to $82,473,000 (1993 prices). This damage would include minor crop losses, but the bulk of the damage would consist of physical damage to residential, commercial, and industrial establishments. Residential and commercial facilities are valued at $52,000,000 (1971 prices), excluding contents, plus $3,500,000 (1971 prices), or $197,333,000 (1993 price levels). Average annual damages with the project are negligible (zero), while without the project they are $14,947,000 (1993 price levels). Flood damages prevented on future developments were determined by projecting future damages at rates equal to the projected population growth and bringing them back to present value by applying a discount rate of 3-1/4 percent. Present values were then amortized for the life of the project to obtain average annual benefits on future damages prevented. The relationship between depth of flooding and percent damage of structures and contents was derived from detailed studies of flood damages in the coastal area of Louisiana for four hurricanes, Carla (1961), Hilda (1964), Betsy (1965) and Camille (1969). These in-depth studies were made for flood insurance rate studies conducted by the U.S. Army Corps of Engineers for the Federal Insurance Administration.

Lafourche Parish has been determined to be an area of "substantial and persistent" unemployment.

The project will provide protection against flooding from hurricanes having a frequency of occurrence of once in 100 years. The average annual benefits are as follows:

Annual Benefits	Amount
Flood Control	$ 4,118,000
Area Redevelopment	28,000
Total	$ 4,146,000

FISCAL YEAR 1996: The total program amount, including the requested and programmed carryover amounts of $1,440,000 and $168,000 respectively, will be applied as follows:

Initiate:	
C-North, 2nd Lift	$ 129,000
Section F, 3rd Lift	10,000
B-North, B-South, C-South, 3rd Lift	325,000
Continue:	
A-West, B-South, 3rd Lift	282,000
Complete:	
Section E-North and South, 2nd Lift	333,000
Surveys and Layouts	36,000
Planning, Engineering and Design	190,000
Construction Management	300,000
Real Estate Support	3,000
Total	$1,608,000

NON-FEDERAL COST: In accordance with the cost sharing and financing concepts reflected in the Flood Control Act of 1965, the Non-Federal sponsor must comply with the requirements listed below:

Requirements of Local Cooperation	Payments During Construction and Reimbursements	Annual Operation, Maintenance, Repair, Rehabilitation and Replacement Costs
Provide lands, easements, and rights-of-way, including borrow and dredged material disposal areas.	$ 5,041,000	-
Accomplish alterations to roads, pipelines, cables, wharves, oil wells, and any other facilities necessary for construction of the project.	$ 7,966,000	-
Bear 30 percent of the total project cost, to include the items listed above and a cash contribution or equivalent work specifically undertaken as an integral part of the project after authorization and in accordance with construction schedules as required by the Chief of Engineers.	$20,893,000	-
Bear all cost of operation and maintenance including replacements.	-	$207,000
Total Non-Federal Cost	$33,900,000	$207,000

The Non-Federal sponsor has also agreed to make all required payments concurrently with project construction.

STATUS OF LOCAL COOPERATION: Assurances covering all requirements of local cooperation were received from the South Lafourche Levee District and accepted on behalf of the United States on 29 August 1973. The South Lafourche Levee District has requested and received funds from the State of Louisiana for rights-of-way acquisition and relocations required to support construction work. In addition to lands and damages and relocations, the South Lafourche Levee District has accomplished $5,300,000 in levee construction, $6,624,000 in pumping station and lateral levee construction, and $1,730,000 in administrative/operating costs.

COMPARISON OF FEDERAL COST ESTIMATES: The current Federal cost estimate of $79,100,000 is a decrease of $700,000 from the latest estimate ($79,800,000) presented to Congress (FY 1995). This change includes the following item:

Item	Amount
Price Level	$ - 700,000
Total	$ - 700,000

STATUS OF ENVIRONMENTAL IMPACT STATEMENT: The Final Environmental Impact Statement was filed with the Council on Environmental Quality on 13 May 1974. A draft supplement to the Environmental Impact Statement covering the revised levee alignments, previously unidentified wetland impacts, and necessary mitigation, was filed with the Environmental Protection Agency on 20 July 1984, and the final supplement was filed with the Environmental Protection Agency on 1 March 1985. An Environmental Assessment covering the revised levee alignment for Section D-North was distributed for review on 3 December 1990, and a Finding of No Significant Impact for the revised alignment was signed on 8 March 1991.

OTHER INFORMATION: Funds to initiate preconstruction engineering and design were appropriated in FY 1967, and funds to initiate construction were appropriated in FY 1972.

APPROPRIATION TITLE: Construction, General - Local Protection (Flood Control)

PROJECT: New Orleans to Venice, Louisiana (Hurricane Protection)(Continuing)

LOCATION: The project is located along the east bank of the Mississippi River from Phoenix, Louisiana, approximately 28 miles southeast of New Orleans, Louisiana to Bohemia, Louisiana and from St. Jude, Louisiana, on the west bank approximately 39 miles southeast of New Orleans, Louisiana to Venice, Louisiana.

DESCRIPTION: The recommended plan on the west side of the Mississippi River consists of enlarging approximately 3 miles of existing back levee between St. Jude and City Price, Louisiana; enlarging approximately 13 miles of existing back levee between City Price and Tropical Bend, Louisiana (Reach "A") and installing two 54-inch flap-gated corrugated metal culverts; enlarging approximately 12 miles of existing back levee between Tropical Bend and Fort Jackson, Louisiana (Reach "B-1") and constructing a floodgate at Empire, Louisiana; enlarging approximately 9 miles of existing back levee between Fort Jackson and Venice, Louisiana (Reach "B-2"); and enlarging approximately 34 miles of existing Mississippi River levee from Mile 10 to Mile 44 above Head of Passes (West Bank River Levee). On the east side of the Mississippi River, the recommended plan consists of enlarging approximately 16 miles of existing back levee between Phoenix, and Bohemia, Louisiana (Reach "C") and installing ten flap-gated culverts. The entire project is programmed.

AUTHORIZATION: Flood Control Act of 1962.

REMAINING BENEFIT-REMAINING COST RATIO: 3.3 to 1 a 2-7/8 percent.

TOTAL BENEFIT-COST RATIO: 2.4 to 1 at 2-7/8 percent.

INITIAL BENEFIT-COST RATIO: 2.4 to 1 at 2-7/8 percent (FY 1964).

BASIS OF BENEFIT-COST RATIO: Benefits are from the latest available evaluation approved in February 1972 at 1971 price levels.

SUMMARIZED FINANCIAL DATA			Accum. Pct. of Est. Fed. Cost
Estimated Federal Cost		$166,000,000	
Estimated Non-Federal Cost		71,000,000	
Cash Contribution	$23,184,000		
Other	47,816,000		
Total Estimated Project Cost		$237,000,000[2]	
Allocations to 30 September 1994		133,235,000	
Conference Allowance for FY 1995		1,539,000	
Allocation for FY 1995		1,385,000[3]	
Allocations through FY 1995		134,620,000	81
Allocation Requested for FY 1996		3,360,000	83
Programmed Balance to Complete After FY 1996		28,020,000	
Unprogrammed Balance to Complete After FY 1995		0	

STATUS: (1 January 1995)	PERCENT COMPLETE	PHYSICAL COMPLETION SCHEDULE
St. Jude to City Price	0	[1]
Reach "A" - City Price to Tropical Bend	61	[1]
Reach "B-1" - Tropical Bend to Fort Jackson	86	[1]
Reach "B-2" - Fort Jackson to Venice	92	[1]
Reach "C" - Phoenix to Bohemia	90	[1]
West Bank River Levee	60	[1]
Entire Project	70	[1]

Each reach, when complete, will provide interim protection from flooding.

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[1] Being determined.

[2] Does not include $505,000 Non-Federal work authorized by the Post Authorization Change Report for St. Jude to City Price Levee Enlargement, approved on 6 March 1992.

[3] Reflects $244,000 reduction assigned as savings and slippage, $90,000 reprogrammed to the project, and $90,000 in programmed carryover into FY 1996.

PHYSICAL DATA

Reach	Levees and Floodwalls	Drainage Structure
St. Jude to City Price	Enlarge approximately 3 miles	None
"A" - City Price to Tropical Bend	Enlarge approximately 13 miles	Two 54" flap-gated corrugated metal culverts.
"B-1" - Tropical Bend to Fort Jackson	Enlarge approximately 12 miles	Floodgate at Empire
"B-2" - Fort Jackson to Venice	Enlarge approximately 9 miles	None
"C" - Phoenix to Bohemia	Enlarge approximately 16 miles	Ten flap-gated culverts
West Bank River Levee	Enlarge approximately 34 miles of levee on the Mississippi River west bank from Mile 10 to Mile 44 above Head of Passes.	None

JUSTIFICATION: The project will provide protection from hurricane tidal overflow to a major part of the developed and inhabited area along the Mississippi River delta. Approximately seventy-five percent of the population and seventy percent of the improved lands within the delta are contained in the project area. Hurricanes in the past have caused overtopping of the existing protective works, resulting in extensive damage to structures, industries, other urban and rural developments, crops, and livestock. Evacuation of inhabitants has been required frequently. The most recent storm causing extensive damages, Hurricane Camille, occurred on 17 August 1969. Severe damages were sustained in Reaches B-1 and B-2 (Empire to Venice), and somewhat lesser damages were sustained in Reach A (Port Sulphur to Empire). Estimated flood damages sustained in the project area due to hurricanes are as follows:

Year of Hurricane	Actual Damages Sustained	Damages at Present Value and Conditions of Development
September 1915	$ 2,325,000	$131,023,000
September 1956 (Flossy)	1,709,000	12,761,000
September 1957 (Esther)	1,180,000	8,911,000
September 1965 (Betsy)	45,500,000	252,035,000
August 1969 (Camille)	62,500,000	246,864,000
October 1985 (Juan)	46,000,000	55,885,000

The present value and type of property subject to flood damages are as follows:

	Flood of Record	Protection by Authorized Works Against Design Flood
Number of Acres:		
Agriculture or undeveloped	11,800	11,800
Residential	2,500	2,500
Commercial	600	600
Marshland	0	0
Total	14,900	14,900
Value of Lands and Improvements:		
Lands	$216,300,000	$216,300,000
Improvements	$359,800,000	$359,800,000
Total	$576,100,000	$576,100,000

The back levees are designed for protection against hurricane-generated stages of 100-year frequency. The maximum flood of record on the east side of the Mississippi River occurred in September 1965 (Betsy). On the west side, the maximum flood occurred in August 1969 (Camille). The damages from hurricane Betsy were $45,500,000 in 1965 ($252,035,000 present). The damages from hurricane Camille were $62,500,000 in 1969 ($246,864,000 present).

The duration of flooding within the project area lasted from about three days to several weeks. The most recent flood event was hurricane Juan in October 1985.

Benefits from the project consist of reduction of flood damage from hurricane tidal overflow caused by overtopping of the existing back levees and land intensification. The average annual benefits are as follows:

Annual Benefits	Amount
Flood Control	$ 14,986,000
Mitigation	13,000
Total	$ 14,999,000

FISCAL YEAR 1996: The total program amount, including the requested and programmed carryover amounts of $3,360,000 and $90,000, respectively, will be applied as follows:

Reach A	
Continue Sta. 314+50 - 681+80, 2nd Enlgt	$ 645,000
Lands and Damages	10,000
Surveys and Layouts	10,000
Planning, Engineering and Design	321,000
Supervision and Administration	125,000
Subtotal	$1,111,000
Reach B-1	
Continue Sta. 0-100, 4th Enlgt	$ 725,000
Lands and Damages	6,000
Surveys and Layouts	8,000
Planning, Engineering and Design	123,000
Supervision and Administration	52,000
Subtotal	$ 914,000
Reach B-2	
Continue Sta. 1-472+74, Final Enlgt	$ 365,000
Surveys and Layouts	$ 8,000
Planning, Engineering and Design	176,000
Supervision and Administration	96,000
Subtotal	$ 645,000
Reach C	
Planning, Engineering and Design	$ 100,000
Subtotal	$ 100,000
West Bank River Levees	
Continue Sta. 1033-1041+20 Gap Closure	$ 115,000
Lands and Damages	15,000
Surveys and Layouts	10,000
Planning, Engineering and Design	465,000
Supervision and Administration	75,000
Subtotal	$ 680,000
Total	$3,450,000

NON-FEDERAL COST: In accordance with the cost sharing and financing concepts reflected in the Flood Control Act of 1965, the non-Federal sponsor must comply with the requirements listed below:

Requirements of Local Cooperation	Payments During Construction and Reimbursements	Annual Operation, Maintenance, Repair, Rehabilitation and Replacement Cost
Provide lands, easements, and rights-of-way including borrow and dredge material disposal areas.	$ 8,124,000	-
Accomplish alterations to roads, pipelines, cables, wharves, oil wells, and any other facilities necessary for construction of the project.	8,515,000	-
Pay 30 percent of the total project cost, to include the items listed above and a cash contribution or equivalent work specifically undertaken as an integral part of the project after authorization and in accordance with construction schedules as required by the Chief of Engineers.	54,361,000	-
Bear all costs of operation, maintenance, repair, rehabilitation, and replacement.		$718,220
Subtotal Non-Federal Costs	71,000,000[1]	$718,220
Bear all of the costs of the construction of the St. Jude to City Price, LA levee enlargement in excess of the cost of the Federal Plan.	505,000	
Total Non-Federal Costs	$71,505,000	

The Non-Federal sponsor has agreed to make all required payments concurrently with project construction.

In addition, prior to project authorization, local interests expended in excess of $3,761,000 between 1 April 1926 and 31 December 1959, in the Mississippi River delta area below New Orleans for levees and interior drainage facilities to provide protection against inundation from storm tides.

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[1] Cost not included in Non-Federal work authorized by the Post-Authorization Change Report for St. Jude to City Price, LA Levee Enlargement, approved on 6 March 1992.

STATUS OF LOCAL COOPERATION: Assurances of local cooperation for Reaches A, B-1, B-2, and C furnished by the Plaquemines Parish Commission Council were accepted on behalf of the United States on 14 April 1965. Supplemental assurances covering provisions of the Uniform Relocations Assistance and Real Property Acquisition Policies Act of 1970, Public Law 91-646, furnished by the Plaquemines Parish Commission Council were accepted on behalf of the United States on 20 June 1973. The local sponsor, on 29 December 1987, provided the supplemental assurances of local cooperation for the West Bank River Levee. These assurances were accepted on 28 January 1988. Supplemental assurances of local cooperation for the St. Jude to City Price, LA levee enlargement were furnished by the Plaquemines Parish Government on 21 December 1992 and were accepted on 18 February 1993.

Local interests have constructed the first and second lifts of Reach C. Based on more detailed planning of construction, a third and fourth lift are required to raise the existing levee to project grade. Credit for equivalent work in lieu of a cash contribution is given upon evaluation of the construction. Local interests have been providing their required cash contributions on schedule to maintain their proportionate share of the project costs.

COMPARISON OF FEDERAL COST ESTIMATE: The current Federal cost estimate of $166,000,000 is unchanged from the latest estimate presented to Congress (FY 1995).

STATUS OF ENVIRONMENTAL IMPACT STATEMENT: The final Environmental Impact Statement was filed with the Council on Environmental Quality on 24 January 1975; however, during subsequent review, it became apparent that the final Environmental Impact Statement was deficient. A draft Environmental Impact Statement supplement was submitted to the Environmental Protection Agency on 23 March 1984, and the final Environmental Impact Statement supplement with a Section 404 evaluation was filed with the Environmental Protection Agency on 12 April 1985. A draft Supplemental Environmental Impact Statement (Supplement II) for work on the West Bank River Levee was submitted to the Environmental Protection Agency on 5 August 1987, and the final was submitted on 4 December 1987.

OTHER INFORMATION: Funds to initiate preconstruction engineering and design were appropriated in FY 1963 and funds to initiate construction were appropriated in FY 1964.

The project will initially impact 9,170 acres of marsh. A mitigation plan has been developed for Reach B that will produce new marsh in the Delta National Wildlife Refuge using delta-splays. Five crevasses in the bank at Main Pass are required for Reach B, of which one has been constructed. The remaining four crevasses are scheduled for construction in FY 1995. A Supplemental Mitigation Plan is being developed to readdress impacts on Reach A and also determine mitigation requirements for Reach C and the West Bank River Levee. Approval of this Supplemental Mitigation Report is expected in FY 1995.

At the request of Plaquemines Parish, we prepared a Post Authorization Change report to incorporate the area from St. Jude to City Price, (an additional 3.3 miles of levee protection), into the project. This area is adjacent to the upstream end of Reach A. Costs for this work are 100 percent non-Federal. Plaquemines Parish wants to include this reach so that flood insurance can be obtained by residents and industry in the area. The lateral levee at City Price, which is currently the upstream terminus of Reach A, will not be constructed. The savings achieved by not constructing the lateral levee and its related relocations will be creditable to the local sponsor. The Post Authorization Change report was submitted to Lower Mississippi Valley Division on 5 February 1992, and was approved 6 Mar 1992. Proposed supplemental assurances were approved on 10 July 1992. Plaquemines Parish Government executed the supplemental assurances on 21 December 1992 and they were accepted on 18 February 1993.

APPROPRIATION TITLE: Construction General - Local Protection (Flood Control)

PROJECT: Westwego to Harvey Canal, Louisiana (Hurricane Protection) (Continuing)

LOCATION: Urban area within Jefferson Parish between Westwego and the Harvey Canal on the west bank of the Mississippi River in the vicinity of New Orleans, Louisiana.

DESCRIPTION: The recommended plan consists of new and enlarged levees along the permitted alignment from the Westwego area to the V-levee, along the existing V-levee alignment to the vicinity of Estelle Pumping Station, and along the existing Harvey Canal-Bayou Barataria Levee to the Cousins Pumping Station. From that point, a floodwall is proposed to parallel the Harvey Canal and tie back into the Harvey Lock. Floodwalls will also be used along the levee alignment mentioned above when tieing into pumping stations and where land constraints dictate. The entire project is programmed.

AUTHORIZATION: Water Resources Development Act of 1986.

REMAINING BENEFIT-REMAINING COST RATIO: 3.8 to 1 at 8-7/8 percent.

TOTAL BENEFIT-COST RATIO: 1.6 to 1 at 8-7/8 percent.

INITIAL BENEFIT-COST RATIO: 2.9 to 1 at 8 5/8 percent (FY 1990).

BASIS OF BENEFIT-COST RATIO: Benefits are from the latest available economic analysis provided in Design Memorandum No. 1, General Design Supplement No.2 entitled "Westwego to Harvey Canal, LA," Hurricane Protection Project dated February 1990 deflated to FY 1989 price levels.

SUMMARIZED FINANCIAL DATA			ACCUM. PCT. OF EST. FED. COST
Estimated Federal Cost		$61,800,000	
Estimated Non-Federal Cost		33,200,000	
Cash Contribution	$ 7,270,000		
Other	25,930,000		
Total Estimated Project Cost		$95,000,000	
Allocations to 30 September 1994		16,424,000	
Conference Allowance for FY 1995		5,100,000	
Allocation for FY 1995		4,293,000 [1]	
Allocations through FY 1995		20,717,000 [2]	34
Allocation Requested for FY 1996		1,000,000	35
Programmed Balance to Complete after FY 1996		40,083,000	
Unprogrammed Balance to Complete after FY 1996		0	

STATUS (1 January 1995)	PERCENT COMPLETE	PHYSICAL COMPLETION SCHEDULE
Entire Project	20	Being Determined

PHYSICAL DATA

Levees: Average Elevation: 11 feet
Length: 16 miles

Floodwalls: Average Elevation: 13 feet
Length: 5 miles

Access Gates: 26

JUSTIFICATION: The project area is generally bounded by the Harvey Canal to the east, Lakes Cataouatche and Salvador to the west, the Mississippi River to the north, and Barataria Bay to the south. Tidal waters can be carried into the project area through Lakes Cataouatche and Salvador, which connect to the Gulf of Mexico through Barataria Bay, and into the Bayou Segnette and the Harvey Canal. Fresh water comes into the area from the Mississippi River via the Harvey and Algiers Locks, direct rainfall, and pumpage from leveed areas. Several hurricanes and tropical storms have passed through or near the project area, including the following major storms: the 1915 hurricane, the 1947 hurricane, and Hurricanes Flossy (1956), Hilda (1964), Betsy (1965), Carmen (1974), Babe (1977), Bob (1979), Danny (1985), and Juan (1985). Hurricane Flossy brought torrential rains and tidal flooding to the project area, with nearby areas recording 16.7 inches of rain in a 24-hour period. Hurricane Hilda raised water levels at Barataria and Lafitte to 3.6 and 4.04 feet NGVD, respectively. Hurricanes Betsy and Carmen also caused flooding to some parts of the project area. Hurricane Juan, generally characteristic of a storm event of approximately 25 years, broke high water records throughout the area, with stages in the Harvey Canal estimated to be the equivalent of a 60-year event. On the west bank, three local levees were breached and several subdivisions were flooded by tidal inundation and the long duration of the high stages. The total precipitation for Juan ranged from 8 to 12 inches over the project area. This storm clearly illustrated that the present local levee system is unable to provide protection against a tidal surge. The quick action and massive flood fighting efforts by the West Jefferson Levee District, the Parish of Jefferson, the National Guard, and thousands of volunteers prevented more extensive flooding of potentially catastrophic proportions.

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[1] Reflects $807,000 reduction assigned as savings and slippage.
[2] Reflects $5,033,000 in programmed carryover into FY 1996.

The project will provide Standard Project Hurricane protection to approximately 42,900 acres of urban land. Total value of all lands is approximately $883,740,000, and of all improvements is $1,743,167,064 at 1994 price levels. The 1990 population was 69,000. Damages from a 500-year storm which could be prevented with the project in place are estimated at $1,094,825,559 at 1994 price levels. The average annual benefits, all flood control, are $26,818,000, based on 1 October 1989 prices.

FISCAL YEAR 1996: The total program amount, including the requested and programmed carryover amounts of $1,000,000 and $5,033,000, respectively, will be applied as follows:

Initiate:	
New Wego PS to Orleans Village, 1st Lift	$1,200,000
Orleans Village to Hwy 45, 1st Lift	536,000
Continue:	
FW/FG V-Lv West of Vertex - 45	800,000
Old Wego to New Wego PS FW(I)	1,200,000
Estelle PS to LP&L PS Levee, 1st Lift	1,051,000
Surveys and Layouts	40,000
Planning, Engineering and Design	544,000
Supervision and Administration	662,000
Total	$6,033,000

NON-FEDERAL COST: In accordance with the cost sharing and financing concepts reflected in the Water Resources Development Act of 1986 (P.L. 99-662), the non-Federal sponsor must comply with the requirements listed below:

Requirements of Local Cooperation	Payments During Construction and Reimbursements	Annual Operation, Maintenance, Repair, Rehabilitation, and Replacement Costs
Provide lands, easements, and rights-of-way, and borrow and excavated material disposal areas.	$ 6,634,000	
Accomplish all alterations and relocations to utilities and facilities (other than railroad bridges) necessary for construction of the project.	8,270,000	
Pay 35 percent of the first cost allocated to hurricane protection. Funds provided by non-Federal interests for interim hurricane protection may be considered beneficial expenditures and may be credited as a part of the non-Federal contribution of the project pursuant to the Water Resources Development Act of 1986.	18,296,000	
Bear all costs of operation, maintenance, and replacement of all features of hurricane protection facilities.		$76,000
Total Non-Federal Costs	$33,200,000	$76,000

Prior to project authorization, local interests initiated levee construction to provide protection against inundation from storm tides and expended approximately $6.7 million. In addition, the Report of the Chief of Engineers recommended credit of approximately $21.4 million for work integral to the project performed subsequent to project authorization. The Assistant Secretary of the Army (Civil Works) approved these credits, subject to audit and the compatibility of the levee work with the final project design.

STATUS OF LOCAL COOPERATION: A Project Cooperation Agreement between the West Jefferson Levee District, local sponsor for the project, and the Federal Government was executed on 18 December 1990. The Project Cooperation Agreement covers all the Federal and non-Federal cost sharing responsibilities for the project.

Local interests have accomplished engineering and design work and constructed numerous reaches of levee. Specifically, about $21,400,000 has been recommended in tentative credit to local interests for work accomplished or to be accomplished, subsequent to project authorization. Actual credit for equivalent work in lieu of cash contribution is given upon verification of engineering and design work and evaluation of the construction.

COMPARISON OF FEDERAL COST ESTIMATE: The current Federal cost estimate of $61,800,000 is an increase of $1,500,000 from the latest estimate ($60,300,000) presented to Congress (FY 1995). This change includes the following item:

Item	Amount
Price Escalation on Construction Features	$1,500,000
Total	$1,500,000

STATUS OF ENVIRONMENTAL IMPACT STATEMENT: The final Environmental Impact Statement was filed with Environmental Protection Agency on 23 October 1987. The Record of Decision was signed 28 March 1989. Environmental Assessments to address refinements in project design were prepared on 23 February 1990, June 1991, March 1992 and August 1993. A finding of no significant impact was signed by the District Commander in each assessment.

OTHER INFORMATION: Funds to initiate preconstruction engineering and design were appropriated in Fiscal Year 1988 and funds to initiate construction were appropriated in Fiscal Year 1990. Construction was initiated in March 1991.

APPROPRIATION TITLE: Construction, General - Local Protection - (Flood Control)

PROJECT: Cape Girardeau - Jackson, Missouri - (Continuing)

LOCATION: The project is located in Cape Girardeau County, Missouri, along the right bank of the Mississippi River between river miles 50 and 55 above the Ohio River.

DESCRIPTION: The project includes a 157 acre dry detention reservoir; approximately 1 mile of channel improvements on Cape La Croix Creek and 2 miles of channel improvements on Walker Branch, 8 bridge replacements; recreational trails and facilities and a sewer line replacing authorized sewage lagoon levee. Unprogrammed work consists of the non-structural flood control features which are not economically justified.

AUTHORIZATION: Water Resources Development Act of 1986 (PL 99-662).

REMAINING BENEFIT-REMAINING COST RATIO: 1.04 to 1 at 8 percent.

TOTAL BENEFIT-COST RATIO: 0.80 to 1 at 8 percent.

INITIAL BENEFIT-COST RATIO: 1.6 to 1 at 8 5/8 percent (FY 1987).

BASIS OF BENEFIT-COST RATIO: The document which provides basis for benefits is the Cape Girardeau-Jackson Metropolitan Area, Missouri - Post Authorization Change - Supportive Economic Analysis - March 1994 at 1993 price level.

SUMMARIZED FINANCIAL DATA			
Estimated Federal Cost			$32,900,000
Programmed Construction		31,077,000	
Unprogrammed Construction		1,823,000	
Estimated Non-Federal Cost			12,200,000
Programmed Construction		11,571,000	
Cash Contribution	2,058,000		
Other Costs	9,513,000		
Unprogrammed Construction		629,000	
Cash Contribution	0		
Other Costs	629,000		

STATUS (1 January 1995)	PERCENT COMPLETE	PHYSICAL COMPLETION SCHEDULE
Entire Project	64	Being Determined

PHYSICAL DATA

Channels: 3 miles
Dams: 1 Dry Detention Reservoir
Bridges: 8
Levees: Sewer line replaces authorized sewage lagoon levee.
Recreation: Trails, camping area, ballfields, sanitary facilities, miscellaneous.

		ACCUM PCT OF EST FED COST
Total Estimated Programmed Construction Cost	$42,648,000	
Total Estimated Unprogrammed Construction Cost	2,452,000	
Total Estimated Project Cost	$45,100,000	
Allocations to 30 September 1994	22,312,000	
Conference Allowance for FY 1995	2,800,000	
Allocation for FY 1995	2,357,000[1]	
Allocations through FY 1995	24,669,000[2]	75
Allocation Requested for FY 1996	200,000	76
Programmed Balance to Complete after FY 1996	6,208,000	
Unprogrammed Balance to Complete after FY 1996	1,823,000	

JUSTIFICATION: The Cape Girardeau - Jackson project area, population 42,000 contains approximately 210 square miles of rural, urban, and developing lands, including 22 square miles previously under study in the Cape La Croix Creek watershed and 5 square miles previously under study in the Little River Diversion Channel study. Gently rolling hill land divided into small watersheds characterizes the study area. It also includes significant flood plain area bordering the Mississippi River and the Little River Diversion Channel. The principal flooding problem within this watershed is flash flooding along Cape La Croix Creek and its tributaries. The type of property subject to flooding encompasses a full range of industrial, commercial and residential usages, as well as some agricultural usage.

In May 1986 the flood of record occurred when approximately 10 to 13 inches of rain fell over the basin causing an estimated $50,000,000 flood damage loss. Several floods have occurred previously, most notably in May 1973 and March 1977. These floods were caused by recorded rainfall of approximately 9 and 7 inches, respectively. Average annual benefits are as follows:

Annual Benefits	Amount
Flood Control	$1,950,000
Recreation	135,000
Total	$2,085,000

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[1] Reflects $443,000 reduction for Savings and Slippage and $1,800,000 in programmed carryover into FY 1996.
[2] Reflects $1,800,000 in programmed carryover into FY 1996.

FISCAL YEAR 1996: The total program amount, including the requested and programmed carryover amounts of $200,000 and $1,800,000; respectively, will be applied as follows:

Initiate:	
Walker Branch Ditching #3	$ 234,000
Initiate & Complete:	
Sewer Line Replaces Sewage Lagoon Levee	212,000
Recreation Facilities #1B	20,000
Continue:	
Lands and Damages	26,000
Complete:	
Walker Branch Ditching #1	209,000
Walker Branch Ditching #2B	953,000
Planning, Engineering and Design	111,000
Supervision and Administration	235,000
Total	$2,000,000

NON-FEDERAL COST: In accordance with the cost sharing and financing concepts reflected in the Water Resources Development Act of 1986, the non-Federal sponsor must comply with the requirements listed below:

Requirements of Local Cooperation	Payment During Construction and Reimbursements	Annual Operation Maintenance, Repair, Rehabilitation and Replacement Costs
Provide lands, easements, rights of way, and borrow and excavated or dredged material disposal areas.	$ 4,870,000	
Modify or relocate utilities, roads, bridges (except railroad bridges) and other facilities where necessary for the construction of the project.	4,537,000	
Pay one half of the separable costs allocated to recreation (except recreational navigation) bear all costs of operation, maintenance, repair, rehabilitation and replacement of recreation facilities.	735,000	$ 17,000
Pay 5 percent of the costs allocated to flood control and bear all costs of operation, maintenance, repair, rehabilitation and replacement of flood control facilities.	2,058,000	111,000
Total Non-Federal Costs	$12,200,000	$128,000

STATUS OF LOCAL COOPERATION: The City of Cape Girardeau, Missouri, local sponsor of the project, is strongly supportive of the project. The Project Cooperation Agreement was executed on 31 May 1990.

COMPARISON OF FEDERAL COST ESTIMATES: The current Federal cost estimate of $32,900,000 is a decrease of $100,000 from the latest estimate ($33,000,000) presented to Congress (FY 1995). This decrease includes the following item:

Item	Amount
Price Escalation on Construction Features	$ -100,000
Total	$ -100,000

STATUS OF ENVIRONMENTAL IMPACT STATEMENT AND COMPLIANCE WITH CLEAN WATER ACT: The Survey Report dated December 1983 contained an Environmental Assessment and Finding of No Significant Impact signed by the St. Louis District Commander. During preparation of the General Design Memorandum, the recommended plan was again examined and the conclusion that the project will have no significant adverse environmental impact was upheld. The survey report also contained an evaluation under Section 404 (b)(1) of the Clean Water Act. Full compliance with the requirements of Sections 401 and 404 of the Clean Water Act was accomplished on 4 May 1990.

OTHER INFORMATION: Funds to initiate preconstruction engineering and design were appropriated in FY 1987 and funds to initiate construction were appropriated in FY 1990.

The total project cost estimate cited in this document exceeds the limits of Section 902 of the Water Resources Development Act of 1986 and will require a reauthorization action by Congress. Based on present schedules and expected funding requirements, obligation and expenditure of funds which would be in excess of the Section 902 limit would occur on the dry detention reservoir contract which is the final major contract on the project. The dry detention reservoir contract is presently scheduled for award in March 1997.

The Missouri Eastern District Court of Appeals has ruled that the City of Cape Girardeau, local sponsor of the project, does have the legal right to condemn property needed for the dry detention reservoir construction which is outside the City limits. The City is proceeding with condemnation actions on remaining tracts needed for the dry detention reservoir.

APPROPRIATION TITLE: Construction, General - Local Protection (Flood Control)

PROJECT: Meramec River Basin, Valley Park Levee, Missouri (Continuing)

LOCATION: The project is located in St. Louis County, Missouri, adjacent to the left bank of the Meramec River between miles 20.7 and 22.1 above the confluence with the Mississippi River.

DESCRIPTION: The project provides for construction of 3.2 miles of levee with 3 feet of freeboard above the 100-year flood profile. Six gravity drains and three closure structures will be constructed. Interior drainage facilities consist of one lift station and four ponding areas. Thirty-three relief wells will be required for under seepage control. Recreational features consist of 2 softball fields, 1 football/soccer field, 1 multi-use court, 15 picnic tables, 2 playgrounds, 1 comfort station, parking facilities, and 2.3 miles of trails. All work is programmed.

AUTHORIZATION: Section 2(h), Public Law 97-128.

REMAINING BENEFIT-REMAINING COST RATIO: 2.4 to 1 at 8 7/8 percent.

TOTAL BENEFIT-COST RATIO: 1.17 to 1 at 8 7/8 percent.

INITIAL BENEFIT-COST RATIO: 1.08 to 1 at 8 7/8 percent (FY 1989).

BASIS OF BENEFIT-COST RATIO: Benefits are based on St. Louis District response to Memorandum, Office of the Assistant Secretary of the Army (Civil Works), 25 June 1992, subject: Lower Meramec River Flood Damage Reduction Project, Missouri, and General Design Memorandum dated March 1987 at October 1991 price level.

SUMMARIZED FINANCIAL DATA			ACCUM. PCT. OF EST. FED COST	STATUS (1 January 1995)	PERCENT COMPLETE	PHYSICAL COMPLETION SCHEDULE
Estimated Federal Cost		13,900,000				
Estimated Non-Federal Cost		5,100,000		Entire Project	2	Being Determined
Cash Contribution	936,000					
Other Costs	4,164,000			PHYSICAL DATA		
Total Estimated Project Cost		19,000,000		Levee:		3.2 miles
Allocations to 30 September 1994		5,608,000		Gravity Drains:		6
Conference Allowance for FY 1995		1,180,000		Closure Structures:		3
Allocation for FY 1995		993,000[1]		Lift Station:		1
Allocations through FY 1995		6,601,000[2]	47	Ponding Areas:		4
Allocation Requested for FY 1996		0	47	Relief Wells:		33
Programmed Balance to Complete after FY 1996		7,299,000		Recreational Features:		Various
Unprogrammed Balance to Complete after FY 1996		0				

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[1] Reflects $187,000 reduction for Savings and Slippage.
[2] Reflects $2,915,000 in programmed carryover into FY 1996.

JUSTIFICATION: The city of Valley Park, Missouri, has experienced severe flooding from the Meramec River nine times since the early 1900's and sustains average annual damages estimated at $1,496,000 (excluding the effects of 2 flood events during 1993 and 1 event in 1994). The total value of structures susceptible to flood damages is estimated to be $33,900,000. The flood of record occurred in December 1982 and caused an estimated $21,624,000 in damages to 108 residential structures and 142 business establishments. This flood had a recurrence interval of approximately once in 70 years. The recommended project will provide 100-year protection to 499 residences and 168 non-residential structures. As recorded by the 1980 census, the population of Valley Park was 3,232. In order to finance the non-Federal portion of project costs, city officials have instituted a number of innovative techniques including solicitation for the donation of right-of-way required for construction and establishment of a Tax Increment Financing (TIF) District. City residents strongly support the project as demonstrated by attendance at rallies, signs posted in yards and at businesses, and participation in letter-writing campaigns. There are no significant adverse environmental impacts associated with the project. Average annual benefits are as follows:

Annual Benefits	Amount
Flood Damage Reduction	$1,382,000
Recreation	166,000
Total	$1,548,000

FISCAL YEAR 1996: The total program amount, including the requested and programmed carryover of $0 and $2,915,000, respectively, with an unobligated carryover of $682,000 into FY 1997 will be applied as follows:

Initiate:	
Grand Glaize Creek	$ 85,000
Levee, Phase II	450,000
Simpson Lake Area	5,000
Complete:	
Fishpot Creek	100,000
Levee, Phase I	951,000
Planning, Engineering, and Design	27,000
Supervision and Administration	615,000
Total	$2,233,000

NON-FEDERAL COST: In accordance with the cost-sharing and financing concepts contained in the Water Resources Development Act of 1986, the non-Federal sponsor must comply with the requirements listed below.

Requirements of Local Cooperation	Payments During Construction and Reimbursements	Annual Operation, Maintenance, Repair Rehabilitation, and Replacement Costs
Provide lands, easements, and rights-of-way.	$ 2,150,000	
Modify or relocate utilities, roads, bridges (except railroad bridges), and other facilities where necessary for the construction of the project.	1,902,000	
Pay one-half of the separable costs allocated to recreation and bear all costs of operation, maintenance, repair, rehabilitation, and replacement of recreation facilities.	112,000	
Pay 5 percent of the costs allocated to flood control to bring the total non-Federal share of flood control costs to 25 percent and bear all costs of operation, maintenance, repair, rehabilitation, and replacement of the project.	936,000	$ 32,000
Total Non-Federal Costs	$ 5,100,000	$ 32,000

STATUS OF LOCAL COOPERATION: By resolution number 2-18-87-1, the Board of Aldermen for the city of Valley Park, Missouri, authorized the mayor to issue a Letter of Intent to sponsor the project. The letter, dated 18 February 1987, acknowledged that city officials were aware of cost sharing requirements and of the items of local cooperation and favored construction of the project. A Project Cooperation Agreement was executed 12 August 1992.

COMPARISON OF FEDERAL COST ESTIMATES: The current Federal (Corps of Engineers) cost estimate of $13,900,000 is the same as the latest estimate ($13,900,000) presented to Congress (FY 1995).

STATUS OF ENVIRONMENTAL IMPACT STATEMENT: During preparation of the Plan Formulation Report and General Design Memorandum, Main Report, and Environmental Assessment, it was determined that implementation of the recommended plan would not have significant adverse effects on the quality of the human environment. A Finding of No Significant Impact was signed by the District Commander on 9 March 1987.

OTHER INFORMATION: Funds to initiate preconstruction engineering and design were appropriated in FY 1983; and funds to initiate construction were appropriated in FY 1991.

The project requires no mitigation.

APPROPRIATION TITLE: Construction, General - Local Protection (Flood Control)

PROJECT: Ste. Genevieve, Missouri (Continuing)

LOCATION: The project is located in Ste. Genevieve County, Missouri, adjacent to the west bank of the Mississippi River between miles 121 and 125 above the confluence of the Ohio River.

DESCRIPTION: The project includes four parts. The programmed portion of the project, Part 1, consists of a 3.5 mile long levee that would provide urban design flood protection, a gravity drain pump facility with a 650 cubic feet per second electric-powered pump, a 505 acre ponding area, interior drainage ditching and grading, three closure structures, 47 relief wells, tree screens, an environmental mitigation area, and other features. Unprogrammed work consists of three parts. Part 2 is channel widening and one small levee along North Gabouri Creek; Part 3 is channel widening and one small levee along South Gabouri Creek; and Part 4 is recreation facilities such as picnic areas and trails on flood control lands along the tributary improvements and the levee.

AUTHORIZATION: The Water Resources Development Act of 1986 (Public Law 99-662).

REMAINING BENEFIT-REMAINING COST RATIO: 1.0 to 1.0.

TOTAL BENEFIT-COST RATIO: 1.0 to 1.0.

INITIAL BENEFIT-COST RATIO: 1.0 to 1.0.

BASIS OF BENEFIT-COST RATIO: Benefits are based on the authorizing language, which states "...Congress finds that, in view of the historic preservation benefits resulting from the project, the overall benefits of the project exceed the costs of the project."

SUMMARIZED FINANCIAL DATA				ACCUM. PCT. OF EST. FED COST
Estimated Federal Cost			38,780,000	
Programmed Construction		35,130,000		
Unprogrammed Construction		3,650,000		
Estimated Non-Federal Cost			14,262,000	
Programmed Construction		11,711,000		
Cash Contributions	9,524,000			
Other Costs	2,187,000			
Estimated Non-Federal Cost				
Unprogrammed Construction		2,551,000		
Cash Contributions	291,000[2]			
Other Costs	2,260,000			
Total Estimated Programmed Construction Cost			46,841,000	
Total Estimated Unprogrammed Construction Cost			6,201,000	
Total Estimated Project Cost			53,042,000	
Allocations to 30 September 1994			4,569,000	
Conference Allowance for FY 1995			3,000,000	
Allocation for FY 1995			3,000,000	
Allocations through FY 1995			7,569,000[3]	20
Allocation Requested for FY 1996			0	20
Programmed Balance to Complete after FY 1996			27,561,000	
Unprogrammed Balance to Complete after FY 1996			3,650,000	

STATUS (1 January 1995)	PERCENT COMPLETE	PHYSICAL COMPLETION SCHEDULE
Part 1	0	Being determined
Parts 2-4	0	Indefinite
Entire project	0	Being determined[1]

PHYSICAL DATA

Part 1	
Road Relocations:	2 locations
Utility Relocations:	4 locations
Levee:	3.5 miles
Gravity Drains:	1
Closure Structures:	3
Pump Station:	650 cfs
Ponding Area:	505 acres
Relief Wells:	47
Part 2 (North Gabouri Creek)	
Channel Widening:	0.62 miles
Bridge Relocations:	2
Part 3 (South Gabouri Creek)	
Channel Widening:	1.23 miles
Bridge Removal:	1
Low Water Crossing:	1
New Bridges:	2
Small Levee:	0.28 miles
Part 4 (Recreation)	
Hiking/Biking Trails:	5.05 miles
Exercise Trail:	1 mile
Picnic Tables :	18
Softball Fields:	2

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[1] For programmed work only; remaining work is unprogrammed pending a decision to construct these features.

[2] Includes $125,000 Part 2 cash contribution less $104,000 Part 2 Federal payment, $176,000 Part 3 cash contribution and $94,000 non-Federal payment for recreation.

[3] Reflects $3,000,000 programmed carryover into FY 1996.

JUSTIFICATION: Ste. Genevieve was founded on the west bank of the Mississippi River by French colonists. The earliest firm documentation of the settlement is a census taken in 1752, although some estimates place the founding as early as 1723. Over a period of years after the flood of 1785, the town was gradually moved from its original location to higher ground at its present location. In 1960 the Secretary of Interior designated a major part of the city and the agricultural fields between the town and the river a national Historic Landmark District. Ste. Genevieve was in the first group of six landmark districts so designated, a group that included Williamsburg, Virginia; Charleston, South Carolina; and Old Deerfield, Massachusetts. Ste. Genevieve is significant and unique because it has been occupied continuously since it was settled and because many of its earliest French colonial buildings were not destroyed during the intervening years. One fourth of all of North America's French colonial buildings are located in Ste. Genevieve. Ste. Genevieve contains the only collection of French colonial houses anywhere on the continent. Its many old residences, its archives and traditions, and its historical continuity make it a living memorial to the settlement and development of America. The 1990 population of Ste. Genevieve was 4,411. Most of the National Historic Landmark District is subject to flooding. The town has no Federally constructed flood protection, although agricultural areas directly across the Mississippi River and up and downstream from Ste. Genevieve are protected by Federally constructed levees. In recent years the community has suffered major Mississippi River floods in 1973, 1979, 1982, 1983, 1986, 1990 and 1993. The 1973 flood caused an estimated $3,000,000 in damages in Ste. Genevieve. Damages from the 1982 flood were estimated by local officials to be $2,400,000. The 1993 flood reached a stage equal to the theoretical 500-year flood in Ste. Genevieve, more than 22 feet above flood stage. Most of the historic buildings were saved by a monumental flood fight effort. According to community officials, bills received from the flood fight totaled $2,000,000, not including donated materials and volunteer time. Volunteers came from all over the United States to fight the flood. This figure also does not include flood damages or post-flood recovery. Other Mississippi River floods occur in Ste. Genevieve more frequently than the major floods, and the community frequently prepares for flood fights. The town is also damaged by flooding along North and South Gabouri Creeks due to local rainfall, but the number of buildings flooded by the creeks is small compared to those flooded by the Mississippi River. As stated in the authorizing language, average annual benefits are equal to average annual costs due to historic preservation benefits.

FISCAL YEAR 1996: The total program amount, including the requested and programmed carryover amounts of $0 and $3,000,000 respectively, with an unobligated carryover of $1,700,000 into FY 1997, will be applied as follows:

Initiate:	
North Closure Structure	$ 500,000
Highway 61 Closure Structure	300,000
Engineering and Design	272,000
Supervision and Administration	228,000
Total	$1,300,000

NON-FEDERAL COST: In accordance with the cost-sharing and financing concepts contained in the Water Resources Development Act of 1986, the non-Federal sponsor must comply with the requirements listed below.

Requirements of Local Cooperation	Payments During Construction and Reimbursements	Annual Operation, Maintenance, Repair Rehabilitation, and Replacement Costs
Provide lands, easements, and rights-of-way.	$ 2,103,000	
Modify or relocate utilities, roads, bridges (except railroad bridges), and other facilities where necessary for the construction of the project.	2,344,000	
Pay one-half of the separable costs allocated to recreation and bear all costs of operation, maintenance, repair, rehabilitation, and replacement of recreation facilities.	94,000	
Pay 5 percent of the costs allocated to flood control to bring the total non-Federal share of flood control costs to 25 percent and bear all costs of operation, maintenance, repair, rehabilitation, and replacement of the project.	9,721,000	$ 107,000
Total Non-Federal Costs	$ 14,262,000	$ 107,000

STATUS OF LOCAL COOPERATION: The City of Ste. Genevieve has assembled the financing to cover the first cost of Part 1 of the project, and possibly Parts 2, 3 and 4 depending on how they may be redesigned in the future. This financing consists of a local sales tax which was overwhelmingly passed in November 1994 that generates about $240,000 per year and does not expire until the project is completed, a grant of $5,500,000 from the National Park Service through the National Trust for Historic Preservation, and a $5,050,000 Community Development Block Grant from the State of Missouri. However, the sponsor currently has not resolved two local cooperation issues: the need to have legal jurisdiction to purchase the lands required for the project, and the need to have funds to operate and maintain the project. The local sponsor plans to fulfill these requirements by entering into an agreement with Ste. Genevieve County Levee District Number 3, whereby Levee District Number 3 will expand their area of jurisdiction to cover the entire levee project area and use their legal rights to obtain the land for the city; and will operate and maintain the project by using their power to impose property taxes for the purpose of operating and maintaining flood protection works. The Project Cooperation Agreement is scheduled to be executed in April 1995.

COMPARISON OF FEDERAL COST ESTIMATES: The current Federal cost estimate is $38,780,000. This estimate has not previously been presented to Congress.

STATUS OF ENVIRONMENTAL IMPACT STATEMENT: An Environmental Impact Statement was completed as part of the Feasibility Report in June 1984. An Environmental Assessment is currently under preparation, and comments are being considered prior to a final determination by the District Commander as to the significance of the project's environmental impacts.

OTHER INFORMATION: Funds to initiate preconstruction engineering and design were appropriated in FY 1990 and funds to initiate construction were appropriated in FY 1995. Plans and specifications for the first item of construction are esentially completed. However, construction is not scheduled to begin until January 1996 due to the need for the local sponsor to acquire lands and easements for the first contract.

The Phase 1 levee project requires environmental mitigation due to adverse impacts on 11.2 acres classified as "waters of the United States." A 28.4 acre wetland mitigation area is included in Part 1 of the project. Fish and wildlife mitigation costs are $136,000.

APPROPRIATION TITLE: Construction, General - Major Rehabilitation - Locks and Dams (Navigation)

PROJECT: Mississippi River, Lock and Dam 25, Illinois and Missouri (Continuing)

LOCATION: Lock and Dam No. 25 is located in Calhoun County, Illinois, and Lincoln County, Missouri, at approximately Mile 241.1 above the mouth of the Ohio River in the vicinity of Winfield, Missouri.

DESCRIPTION: The project plan provides for the rehabilitation of portions of the structure. The work will include rehabilitation or replacement of miter gates, culvert valves, auxiliary lock closure structure, lock dewatering system, Illinois abutment, Sandy Slough bridge, and selected mechanical and electrical items (power distribution system, lock motors and controllers, control system, and miter gate machinery). All work is programmed.

AUTHORIZATION: River and Harbor Act of 1935 and Water Resources Development Acts of 1986 and 1992.

REMAINING BENEFIT-REMAINING COST RATIO: 5.3 to 1 at 8 1/2 percent.

TOTAL BENEFIT-COST RATIO: 4.0 to 1 at 8 1/2 percent.

INITIAL BENEFIT-COST RATIO: 4.2 to 1 at 8 1/2 percent.

BASIS OF BENEFIT-COST RATIO: Based on the Major Rehabilitation Report, Lock and Dam No. 25, Mississippi River, submitted June 1992 at October 1991 price levels. Benefit cost-ratio is a composite of all items analyzed for major rehabilitation.

SUMMARIZED FINANCIAL DATA			STATUS (1 January 1995)	PERCENT COMPLETE	PHYSICAL COMPLETION SCHEDULE
Estimated Federal Cost		21,400,000			
General Appropriation	10,700,000				
Inland Waterways Trust Fund	10,700,000		Entire Project	3	May 1997
Estimated Non-Federal Cost		0			
Total Estimated Project Cost		21,400,000			

	General Appropriation	Inland Waterways Trust Fund	ACCUM. PCT. OF EST. FED COST
Allocations to 30 September 1994	415,000	415,000	
Conference Allowance for FY 1995	1,900,000	1,900,000	
Allocation for FY 1995	1,599,000[1]	1,599,000[1]	
Allocations through FY 1995	2,014,000[2]	2,014,000[2]	19
Allocation Requested for FY 1996	2,150,000	2,150,000	39
Programmed Balance to Complete after FY 1996	6,536,000	6,536,000	
Unprogrammed Balance to Complete after FY 1996	0	0	

PHYSICAL DATA

Lock: Major rehabilitation of the existing lock will include replacing miter gates, culvert valves, selected mechanical and electrical items, and installing a dewatering system.

Dam: Major rehabilitation of the existing dam will include replacing selected mechanical and electrical items, the auxiliary lock closure structure, and repairing the Illinois abutment.

Bridge: Major rehabilitation of the existing access bridge will include replacement with a higher load level, two-lane bridge.

JUSTIFICATION: Lock and Dam 25 has been operating for over 50 years. While ordinary maintenance has been performed to keep the facility operating, the wear and tear on some items is beyond ordinary maintenance. Consequently, in order to provide an acceptable level of reliability, major rehabilitation of various structural, geotechnical, electrical, and mechanical components of the facility must be undertaken. The average annual benefits, all navigation, are $8,924,000 based on 1 October 1991 price levels.

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[1] Reflects $602,000 reduction assigned as Savings and Slippage (General Appropriation and Inland Waterways Trust Fund).
[2] Reflects $1,700,000 in programmed carryover into FY 1996 (General Appropriation and Inland Waterways Trust Fund).

FISCAL YEAR 1996: The total program amount, including the requested amount and programmed carryover amounts of $4,300 and of $1,700,000, respectively, will be applied as follows:

Initiate:	
Auxiliary Lock Closure Rehabilitation	$ 80,000
Lock Dewatering System	80,000
Mechanical and Electrical Rehabilitation	1,152,000
Initiate & Complete:	
Miter Gate Installation	214,000
Complete:	
Illinois Abutment	534,000
Auxiliary Lock Closure Gate	970,000
Miter Gate Replacement	544,000
Culvert Tainter Valves	284,000
Sandy Slough Bridge	514,000
Planning, Engineering, and Design	588,000
Supervision and Administration	1,040,000
Total	6,000,000

NON-FEDERAL COST: In accordance with the cost-sharing and financing concepts reflected in the Water Resources Development Act of 1986, 50 percent of the total cost of construction will be derived from the Inland Waterways Trust Fund.

STATUS OF LOCAL COOPERATION: None required.

COMPARISON OF FEDERAL COST ESTIMATE: The current Federal cost estimate of $21,400,000 is a decrease of $600,000 from the latest estimate ($22,000,000) submitted to Congress (FY 1995). This change includes the following items:

Item	Amount
Price Escalation on Construction Features	- $238,000
Post Contract Award and Other Estimating Adustments (including contingency adjustments)	- 362,000
Total	- $600,000

STATUS OF ENVIRONMENTAL IMPACT STATEMENT: The Environmental Assessment resulted in a Finding of No Significant Impact.

OTHER INFORMATION: Funds to initiate construction were appropriated in FY 1994. The project requires no mitigation.

LOWER MISSISSIPPI VALLEY DIVISION
JUSTIFICATION OF ESTIMATE

APPROPRIATION TITLE: Operation and Maintenance, General, FY 1996

1. Navigation

a. Channels and Harbors

The budget estimate of $130,076,000 provides for essential operation and maintenance on 25 channel projects named in the list which follows. The work to be accomplished under this activity consists of operating and maintaining the coastal navigation channels, harbors and anchorages by means of dredging, constructing bulkheads and spoil disposal areas, snagging, and repairing channel stabilization works, navigation structures, and harbor jetties, all as authorized in the laws pertaining to river and harbor projects.

STATE Project Name	ESTIMATED OBLIGATIONS FY 1995 ($) Total (Operations) (Maintenance)	ESTIMATED OBLIGATIONS FY 1996 ($) Total (Operations) (Maintenance)	Reason for Change and Major Maintenance Items 1. Reasons for Change in Operations from FY 1995 to FY 1996 (10%+/-). 2. Major Maintenance Items Budgeted in FY 1996 (Threshold $500,000).
Arkansas			
Helena Harbor	521,000 (30,000) (491,000)	500,000 (30,000) (470,000)	1. None. 2. None.
Osceola Harbor	568,000 (27,000) (541,000)	453,000 (25,000) (428,000)	1. None. 2. None.
Yellow Bend Port	140,000 (3,000) (137,000)	142,000 (3,000) (139,000)	1. None. 2. None.
White River	2,061,000 (55,000) (2,006,000)	2,200,000 (67,000) (2,133,000)	1. Dredging surveys. 2. None.
Kentucky			
Elvis Stahr Harbor	562,000 (40,000) (522,000)	400,000 (30,000) (370,000)	1. Variation in dredge surveys. 2. Dredging.

LOWER MISSISSIPPI VALLEY DIVISION
JUSTIFICATION OF ESTIMATE

APPROPRIATION TITLE: Operation and Maintenance, General, FY 1996

1. Navigation (Cont'd)

STATE Project Name	ESTIMATED OBLIGATIONS FY 1995 ($) Total (Operations) (Maintenance)	 FY 1996 ($) Total (Operations) (Maintenance)	Reason for Change and Major Maintenance Items 1. Reasons for Change in Operations from FY 1995 to FY 1996 (10%+/-). 2. Major Maintenance Items Budgeted in FY 1996 (Threshold $500,000).
Louisiana			
Atchafalaya River,	8,803,000	12,786,000	
Bayous Chene,	(200,000)	(159,000)	1. Additional survey requirements associated with dredging.
Boeuf and Black	(8,603,000)	(12,627,000)	2. Dredging.
Bartaria Bay	2,505,000	921,000	
Waterway	(105,000)	(171,000)	1. Additional survey requirements associated with dredging.
	(2,400,000)	(750,000)	2. Dredging.
Calcasieu River	11,274,000	4,095,000	
and Pass	(745,000)	(795,000)	1. None.
	(10,529,000)	(3,300,000)	2. Dredging.
Freshwater Bayou	1,302,000	1,659,000	
	(959,000)	(989,000)	1. None.
	(343,000)	(670,000)	2. None.
Gulf Intracoastal	12,144,000	16,110,000	
Waterway	(7,902,000)	(6,261,000)	1. Realignment of Operations and Maintenance funding to more realistically reflect work being accomplished.
	(4,242,000)	(9,849,000)	2. Replace guidewall and shop building at Algiers lock and purchase two replacement gates at Calcasieu lock.
Houma Navigation	2,064,000	3,897,000	
Canal	(160,000)	(247,000)	1. Variation in Environmental compliance.
	(1,904,000)	(3,650,000)	2. Dredging.
Lake Providence	273,000	292,000	
	(6,000)	(6,000)	1. None.
	(267,000)	(286,000)	2. None.

LOWER MISSISSIPPI VALLEY DIVISION
JUSTIFICATION OF ESTIMATE

APPROPRIATION TITLE: Operation and Maintenance, General, FY 1996

1. Navigation (Cont'd)

STATE Project Name	ESTIMATED OBLIGATIONS FY 1995 ($) Total (Operations) (Maintenance)	 FY 1996 ($) Total (Operations) (Maintenance)	Reason for Change and Major Maintenance Items 1. Reasons for Change in Operations from FY 1995 to FY 1996 (10%+/-). 2. Major Maintenance Items Budgeted in FY 1996 (Threshold $500,000).
Madison Parish Port	139,000 (3,000) (136,000)	37,000 (3,000) (34,000)	1. None. 2. None.
Mississippi River, Baton Rouge to Gulf of Mexico	41,066,000 (3,860,000) (37,206,000)	51,837,000 (2,931,000) (48,906,000)	1. Variation in survey requirements in FY 1995. 2. Dredging.
Mississippi River - Gulf Outlet	6,645,000 (220,000) (6,425,000)	12,054,000 (432,000) (11,622,000)	1. Variation in survey requirements in FY 1996. 2. Dredging.
Mississippi Outlets at Venice	837,000 (95,000) (742,000)	1,645,000 (65,000) (1,580,000)	1. Variation in survey requirements in FY 1995. 2. Dredging.
Tangipahoa	100,000 (0) (100,000)	100,000 (0) (100,000)	1. None. 2. None.
Waterway Empire to Gulf	65,000 (0) (65,000)	11,000 (0) (11,000)	1. None. 2. Dredging.
Mississippi			
Claiborne County Port	4,000 (4,000) (0)	153,000 (3,000) (150,000)	1. None. 2. Dredging.
Mouth of Yazoo River	111,000 (7,000) (104,000)	113,000 (7,000) (106,000)	1. None. 2. None.

6 February 1995

LOWER MISSISSIPPI VALLEY DIVISION
JUSTIFICATION OF ESTIMATE

APPROPRIATION TITLE: Operation and Maintenance, General, FY 1996

1. Navigation (Cont'd)

STATE Project Name	ESTIMATED OBLIGATIONS FY 1995 ($) Total (Operations) (Maintenance)	 FY 1996 ($) Total (Operations) (Maintenance)	Reason for Change and Major Maintenance Items 1. Reasons for Change in Operations from FY 1995 to FY 1996 (10%+/-). 2. Major Maintenance Items Budgeted in FY 1996 (Threshold $500,000).
Rosedale Harbor	418,000	410,000	
	(6,000)	(6,000)	1. None.
	(412,000)	(404,000)	2. None.
Yazoo River, MS	77,000	3,000	
	(3,000)	(0)	1. None.
	(74,000)	(3,000)	2. None.
Missouri			
Caruthersville Harbor	312,000	300,000	
	(35,000)	(30,000)	1. None.
	(277,000)	(270,000)	2. None.
Mississippi River Btn Ohio & Missouri Rivers	14,136,000	18,858,000	
	2,792,000	3,486,000	1. Variation in dredge surveys.
	11,344,000	15,372,000	2. Dredging.
Southeast MO Port	215,000	150,000	
	(0)	(30,000)	1. Perform sedimentation surveys in FY 1996.
	(215,000)	(120,000)	2. None.
New Madrid Harbor	191,000	300,000	
	(17,000)	(25,000)	1. None.
	(174,000)	(275,000)	2. Dredging.
Tennessee			
Wolf River Harbor	690,000	650,000	
	(32,000)	(20,000)	1. None.
	(658,000)	(630,000)	2. None.
TOTAL - Channels and Harbors	107,233	130,076	
	(17,321)	(15,835)	
	(89,912)	(114,241)	

6 February 1995

LOWER MISSISSIPPI VALLEY DIVISION
JUSTIFICATION OF ESTIMATE

APPROPRIATION TITLE: Operation and Maintenance, General, FY 1996

1. Navigation (Cont'd)

b. Locks and Dams

The program request of $33,700,000 provides for the Operations and Maintenance requirements of eight canalized waterways including portions of the Illinois Waterway and Mississippi River projects within the Division boundaries. Requirements include: operation and ordinary maintenance of project facilities; labor, supplies, materials and parts for day-to-day functioning, and periodic maintenance, repairs, and replacements.

	ESTIMATED OBLIGATIONS		Reason for Change and Major Maintenance Items
STATE Project Name	FY 1995 ($) Total (Operations) (Maintenance)	FY 1996 ($) Total (Operations) (Maintenance)	1. Reasons for Change in Operations from FY 1995 to FY 1996 (10%+/-). 2. Major Maintenance Items Budgeted in FY 1996 (Threshold $500,000).
Arkansas			
Ouachita and Black Rivers, AR and LA	4,850,000 (4,300,000) (550,000)	5,304,000 (4,561,000) (743,000)	1. Variation in survey requirements. 2. None.
Illinois			
Illinois Waterway (LMVD)	748,000 (356,000) (392,000)	1,440,000 (454,000) (986,000)	1. None. 2. Dredging.
Mississippi River between Missouri River and Minneapolis, MN	9,737,000 (5,140,000) (4,597,000)	12,437,000 (5,447,000) (6,990,000)	1. None. 2. Dredging.
Kaskaskia River	1,535,000 (837,000) (698,000)	1,717,000 (948,000) (769,000)	1. None. 2. None.

LOWER MISSISSIPPI VALLEY DIVISION
JUSTIFICATION OF ESTIMATE

APPROPRIATION TITLE: Operation and Maintenance, General, FY 1996

1. Navigation (Cont'd)

STATE Project Name	ESTIMATED OBLIGATIONS FY 1995 ($) Total (Operations) (Maintenance)	ESTIMATED OBLIGATIONS FY 1996 ($) Total (Operations) (Maintenance)	Reason for Change and Major Maintenance Items 1. Reasons for Change in Operations from FY 1995 to FY 1996 (10%+/-). 2. Major Maintenance Items Budgeted in FY 1996 (Threshold $500,000).
Louisiana			
Bayou Teche	286,000 (120,000) (166,000)	727,000 (279,000) (448,000)	1. Variation in survey requirements. 2. Dredging.
Mermentau River	4,388,000 (797,000) (3,591,000)	2,081,000 (841,000) (1,240,000)	1. None. 2. Dredging.
Red River Waterway, Mississippi River to Shreveport, LA	6,148,000 (4,000,000) (2,148,000)	9,714,000 (5,042,000) (4,672,000)	1. First full year operation FY 1996 lock and dam 4 & 5. 2. First full year dredging FY96 pools 4 & 5.
Mississippi			
Pearl River	242,000 (242,000) (0)	280,000 (280,000) (0)	1. None. 2. None.
Projects Periodically Maintained	106,000 (10,000) (96,000)	0 (0) (0)	1. Variation in periodically maintained projects. 2. None
Total - Locks and Dams	28,040,000 (15,802,000) (12,238,000)	33,700,000 (17,852,000) (15,848,000)	
Total - NAVIGATION	135,273,000 (33,123,000) (102,150,000)	163,776,000 (33,687,000) (130,089,000)	

LOWER MISSISSIPPI VALLEY DIVISION
JUSTIFICATION OF ESTIMATE

APPROPRIATION TITLE: Operation and Maintenance, General, FY 1996

2. Flood Control

a. Reservoirs

The program request of $14,443,000 for the Operation and Maintenance of eight flood control reservoir projects providing the amount necessary for operational requirements. Annual requirements are for the necessary operation and ordinary maintenance of project facilities; labor, supplies, materials and parts required for day-to-day functioning of the projects; and contract law enforcement. The requested amount also applications of special recreation user fees for recreation areas.

	ESTIMATED OBLIGATIONS		Reason for Change and Major Maintenance Items
STATE Project Name	FY 1995 ($) Total (Operations) (Maintenance)	FY 1996 ($) Total (Operations) (Maintenance)	1. Reasons for Change in Operations from FY 1995 to FY 1996 (10%+/-). 2. Major Maintenance Items Budgeted in FY 1996 (Threshold $500,000).
Illinois			
Carlyle Lake	3,519,000	3,715,000	
	(2,629,000)	(2,497,000)	1. None.
	(890,000)	(1,218,000)	2. None.
Lake Shelbyville	4,684,000	6,399,000	
	(2,819,000)	(2,787,000)	1. None.
	(1,865,000)	(3,612,000)	2. Maintenance of recreation and shoreline restoration.
Rend Lake	3,401,000	3,434,000	
	(2,612,000)	(2,282,000)	1. None.
	(789,000)	(1.152,000)	2. None.
Louisiana			
Bayou Bodcau Reservoir	357,000	504,000	
	(350,000)	(490,000)	1. Periodic inspection of dam and master plan updates in FY 96.
	(7,000)	(14,000)	2. None.
Caddo Lake	113,000	159,000	
	(113,000)	(159,000)	1. Periodic inspection of dam and cultural resource inventory in FY 1996.
	(0)	(0)	2. None.

6 February 1995

LOWER MISSISSIPPI VALLEY DIVISION
JUSTIFICATION OF ESTIMATE

APPROPRIATION TITLE: Operation and Maintenance, General, FY 1996

2. Flood Control (Cont'd)

STATE Project Name	ESTIMATED OBLIGATIONS FY 1995 ($) Total (Operations) (Maintenance)	ESTIMATED OBLIGATIONS FY 1996 ($) Total (Operations) (Maintenance)	Reason for Change and Major Maintenance Items 1. Reasons for Change in Operations from FY 1995 to FY 1996 (10%+/-). 2. Major Maintenance Items Budgeted in FY 1996 (Threshold $500,000).
Wallace Lake	180,000	186,000	
	(167,000)	(171,000)	1. None.
	(13,000)	(15,000)	2. None.
Missouri			
Union Lake	14,000	16,000	
	(0)	(0)	1. None.
	(14,000)	(16,000)	2. None.
Wappapello Lake	10,000	20,000	
	(0)	(0)	1. None.
	(10,000)	(20,000)	2. None.
Total - Reservoirs	12,278,000	14,433,000	
	(8,690,000)	(8,386,000)	
	(3,588,000)	(6,047,000)	

LOWER MISSISSIPPI VALLEY DIVISION
JUSTIFICATION OF ESTIMATE

APPROPRIATION TITLE: Operation and Maintenance, General, FY 1996

2. Flood Control (Cont'd)

b. Channel Improvements, Inspections and Miscellaneous Maintenance

The budget estimate of $1,395,000 provides for inspection of completed works during the budget year. All work is programmed.

STATE Project Name	ESTIMATED OBLIGATIONS FY 1995 ($) Total (Operations) (Maintenance)	 FY 1996 ($) Total (Operations) (Maintenance)	Reason for Change and Major Maintenance Items 1. Reasons for Change in Operations from FY 1995 to FY 1996 (10%+/-). 2. Major Maintenance Items Budgeted in FY 1996 (Threshold $500,000).
Bayou Pierre	25,000 (0) (25,000)	24,000 (0) (24,000)	1. None. 2. None.
Inspection of Completed Works	1,257,000 (1,257,000) (0)	1,371,000 (1,371,000) (0)	1. Variation in inspections. 2. None.
Total - Channel Improvements Inspection and Misc Maintenance	1,282,000 (1,257,000) (25,000)	1,395,000 (1,370,000) (25,000)	
TOTAL - FLOOD CONTROL	13,560,000 (9,947,000) (3,613,000)	15,828,000 (9,756,000) (6,072,000)	

LOWER MISSISSIPPI VALLEY DIVISION
JUSTIFICATION OF ESTIMATE

APPROPRIATION TITLE: Operation and Maintenance, General, FY 1996

3. Multiple Purpose Power Projects

The program request of $17,632,000 for the operation and maintenance of four multiple purpose projects provides the amount necessary for operation requirements. Annual requirements are for the necessary operation and ordinary maintenance of project facilities, labor, supplies, materials and parts required for day to day functioning of the project; and contract law enforcement. The requested amount also includes application of Special Recreation Use Fees for recreation areas.

	ESTIMATED OBLIGATIONS		Reason for Change and Major Maintenance Items
STATE	FY 1995 ($)	FY 1996 ($)	1. Reasons for Change in Operations from FY 1995 to FY 1996 (10%+/-).
	Total	Total	
Project Name	(Operations)	(Operations)	2. Major Maintenance Items Budgeted in FY 1996
	(Maintenance)	(Maintenance)	(Threshold $500,000).
ARKANSAS			
Blakely Mt. Dam	4,753,000	4,640,000	
Lake Ouachita	(4,000,000)	(4,075,000)	1. None.
	(753,000)	(565,000)	2. None.
DeGray Lake	4,474,000	4,189,000	
	(3,500,000)	(3,500,000)	1. None.
	(974,000)	(689,000)	2. None.
Narrows Dam-Lake	3,512,000	3,524,000	
Greeson	(3,000,000)	(3,017,000)	1. None.
	(512,000)	(507,000)	2. None.
Missouri			
Clarence Cannon	5,516,000	5,279,000	
and Reservoir	(3,979,000)	(3,778,000)	1. None.
	(1,537,000)	(1,501,000)	2. None.
TOTAL - MULTIPLE	18,255,000	17,632,000	
PURPOSE	(14,479,000)	(14,370,000)	
	(3,776,000)	(3,262,000)	

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LOWER MISSISSIPPI VALLEY DIVISION
JUSTIFICATION OF ESTIMATE

APPROPRIATION TITLE: Operation and Maintenance, General, FY 1996

4. Protection of Navigation

The aquatic program request shown provides for accomplishing the work necessary for the eradication of acquatic plant and project condition surveys.

STATE Project Name	ESTIMATED OBLIGATIONS FY 1995 ($) Total (Operations) (Maintenance)	ESTIMATED OBLIGATIONS FY 1996 ($) Total (Operations) (Maintenance)	Reason for Change and Major Maintenance Items 1. Reasons for Change in Operations from FY 1995 to FY 1996 (10%+/-). 2. Major Maintenance Items Budgeted in FY 1996 (Threshold $500,000).
Aquatic Growth	1,832,000 (0) (1,832,000)	1,865,000 (0) (1,865,000)	1. None. 2. None.
Project Condition Surveys	190,000 (190,000) (0)	172,000 (172,000) (0)	1. None. 2. None.
TOTAL-PROTECTION OF NAVIGATION	2,022,000 (190,000) (1,832,000)	2,037,000 (172,000) (1,865,000)	
GRAND TOTAL-LOWER MISSISSIPPI VALLEY DIVISION	169,110,000 (57,739,000) (111,371,000)	199,273,000 (57,985,000) (141,288,000)	

Justification of Estimates for Civil Functions Activities
Department of the Army, Corps of Engineers
Fiscal Year 1996

SUMMARY MISSISSIPPI RIVER COMMISSION

Flood Control, Mississippi River and Tributaries, AR, IL, KY, LA, MO, MS, & TN

	FY 1995 Allocation	FY 1996 Request	Increase or Decrease
General Investigations	$ 8,478,000	$ 5,263,000	$ -3,215,000
Surveys	(5,064,000)	(2,863,000)	(-2,201,000)
Preconstruction Engineering and Design	(3,414,000)	(2,400,000)	(-1,014,000)
Construction	216,013,000	217,940,000	1,927,000
Dam Safety Assurance	0	0	0
Operation and Maintenance	140,693,000	134,188,000	-6,505,000
Project Operation	(43,615,000)	(48,622,000)	(+5,007,000)
Project Maintenance	(97,078,000)	(85,566,000)	(-11,512,000)
Less Reduction for Savings and Slippage	-37,046,000	-38,141,000	-1,095,000
GRAND TOTAL	$ 328,138,000	$ 319,250,000	$-8,888,000

APPROPRIATION TITLE: Flood Control, Mississippi River and Tributaries, AR, IL, KY, LA, MS, MO, and TN, General Investigations, Fiscal Year 1996

Study	Total Estimated Federal Cost ($)	Allocation Prior to FY 1995 ($)	Allocation FY 1995 ($)	Tentative Allocation FY 1996 ($)	Additional to Complete After FY 1996 ($)
1. SURVEYS - NEW - None.					
2. SURVEYS - CONTINUING					
a. Navigation Studies: None.					
b. Flood Damage Prevention Studies: The amount of $2,538,000 is requested for the continuation of three studies.					
LOUISIANA					
Morganza, Louisiana to the Gulf of Mexico	3,080,000	1,080,000	538,000	500,000	962,000

The study area is located in south Louisiana and includes portions of Terrebonne, and Lafourche, Parishes. The study area is subject to primarily backwater, and tidal flooding. Extensive flooding occurred in the study area in 1973. Less extensive, but still widespread flooding, has occurred since that time, notable in 1989, May 1991, and 1992. In the May 1991 event, damages in Lafourche and Terrebonne Parishes were estimated at $12,000,000. The Louisiana Department of Transportation and Development has expressed its intention to share equally in the cost of the feasibility phase should a positive recommendation be made in the reconnaissance report. Between 1950 and 1990, the population increased from 61,000 to 97,0000 or about 59 percent. Increases in population and other land use changes such as land clearing, subsidence and land loss have contributed to the increased stages. Also, there is a high probability that improvements to existing flood control system have not kept pace with population growth and land use changes that would increase runoff. The expected outcome of the study would be to recommend hurricane protection for Terrebonne and Lafourche Parishes.

Fiscal Year 1995 funds are being used to complete the reconnaissance phase at full Federal expense and, if the reconnaissance report is certified to be in accord with policy, continue into the feasibility phase. The funds requested for Fiscal Year 1996 will be used to continue the feasibility phase of the study. The preliminary estimated cost of the feasibility phase is $4,000,000, which is to be shared on a 50-50 percent basis by Federal and non-Federal interests. Up to one half of the non-Federal share may be in-kind services. A summary of study cost sharing is as follows:

Total Estimated Study Cost	$5,080,000
Reconnaissance Phase (Federal)	1,080,000
Feasibility Phase (Federal)	2,000,000
Feasibility Phase (Non-Federal)	2,000,000

The reconnaissance report was completed in April 1994. The reconnaissance phase is scheduled for completion in April 1995. The feasibility study is scheduled for completion in November 1998.

APPROPRIATION TITLE: Flood Control, Mississippi River and Tributaries, AR, IL, KY, LA, MS, MO, and TN, General Investigations, Fiscal Year 1996

Study	Total Estimated Federal Cost ($)	Allocation Prior to FY 1995 ($)	Allocation FY 1995 ($)	Tentative Allocation FY 1996 ($)	Additional to Complete After FY 1996 ($)
Mississippi Delta, MS	9,582,000	3,792,000	2,840,000	1,800,000	1,150,000

The Mississippi Delta, Mississippi, area is a primary center for agriculture in Mississippi. Devastating flooding in the spring of 1991 inundating approximately 600,000 acres in the Sunflower River Basin, including many small towns, illustrates the seriousness of flooding problems to be addressed by this study. Damages exceeded $40 million with over 1,000 residential, commercial, and other structures inundated.

Reconnaissance studies of this area identified conceptual alternative measures to meet the needs described above. These included channel improvement, weirs in streams, grade/water control structures, and environmental design features. Based on these conceptual plans, a flood control project was found to be feasible in the Mississippi Delta, Mississippi, reconnaissance report.

Fiscal Year 1995 funds are being used to continue the feasibility phase of the study. Funds requested for Fiscal Year 1996 will also be used to continue feasibility studies. The estimated cost of the feasibility phase is $8,300,000.

The reconnaissance phase was completed in June 1993. The feasibility study is scheduled for completion in July 1997.

APPROPRIATION TITLE: Flood Control, Mississippi River and Tributaries, AR, IL, KY, LA, MS, MO, and TN, General Investigations, Fiscal Year 1996

Study	Total Estimated Federal Cost ($)	Allocation Prior to FY 1995 ($)	Allocation FY 1995 ($)	Tentative Allocation FY 1996 ($)	Additional to Complete After FY 1996 ($)
TENNESSEE					
Reelfoot Lake, TN & KY	2,092,000	1,155,000	149,000	238,000	550,000

Reelfoot Lake is located in Lake and Obion Counties in northwest Tennessee and Fulton County in southwest Kentucky. The Reelfoot Lake Basin extends 35 miles in a southerly direction between Hickman, Kentucky, and the Obion River in Tennessee. The basin covers an area of 268 square miles with Reelfoot Lake covering 13,000 acres at normal pool elevation. The lake and its surrounding ecosystem provide unique and significant habitat for fish and wildlife resources. The existing spillway provides a very narrow range of acceptable water level management options. The limited management options, combined with underseepage of the spillway, has resulted in decreased flood storage availability and increased flood damages. Additionally, the topography and land use of the basin have resulted in an unusually high rate of sediment deposition in the lake. A reconnaissance report was completed in November 1993 and determined there was a need for fish and wildlife habitat restoration in the vicinity of Reelfoot Lake. The report concluded Corps projects had contributed, in part, to the degradation which has occurred at Reelfoot Lake. It was determined an alternative spillway, circulation channels in the lake, a sediment retention basin, waterfowl management units, and features for water level management at Lake Isom would aid in restoring fish and wildlife habitat in the basin while maintaining flood control capabilities of Reelfoot Lake. The feasibility study will investigate the need for and the feasibility of improvements in the area in the interest of fish and wildlife habitat restoration, flood control and allied purposes. The State of Tennessee, acting through the Tennessee Wildlife Resources Agency, signed the Feasibility Cost Sharing Agreement on 24 October 1994.

Fiscal Year 1995 funds are being used to continue into the feasibility phase of the study. The funds requested for Fiscal Year 1996 will be used to continue the feasibility phase of the study. The preliminary estimated cost of the feasibility phase is $2,620,000, which will be shared on a 50-50 percent basis by Federal and non-Federal interests. Up to one-half of the non-Federal share may be in-kind services. A summary of study cost sharing is as follows:

Total Estimated Study Cost	$3,402,000
Reconnaissance Phase (Federal)	782,000
Feasibility Phase (Federal)	1,310,000
Feasibility Phase (Non-Federal)	1,310,000

The reconnaissance phase was completed in December 1994. The feasibility study is scheduled for completion in December 1998.

APPROPRIATION TITLE: Flood Control, Mississippi River and Tributaries, AR, IL, KY, LA, MS, MO, and TN, General Investigations, Fiscal Year 1996

Study	Total Estimated Federal Cost ($)	Allocation Prior to FY 1995 ($)	Allocation FY 1995 ($)	Tentative Allocation FY 1996 ($)	Additional to Complete After FY 1996 ($)
TOTAL - Flood Damage Prevention Studies	14,754,000	6,027,000	3,527,000	2,538,000	2,662,000
c. Shoreline Protection Studies: None.					
d. Special Studies: None.					
e. Comprehensive Studies: None.					
f. Collection and Study of Basic Data	N/A	N/A	293,000	325,000	N/A

Surveys, Gages, and Observations. The funds requested for Fiscal Year 1996 are for collection of essential basic data which are subsequently used in the planning and design of flood control projects. The data collected under this activity are for authorized projects or units thereof for which funds have not been appropriated. The data to be collected will consist of information on stream flow, rainfall, floods, and other items of related hydrologic nature.

Study	Total Estimated Federal Cost ($)	Allocation Prior to FY 1995 ($)	Allocation FY 1995 ($)	Tentative Allocation FY 1996 ($)	Additional to Complete After FY 1996 ($)
TOTAL - Collection and Study of Basic Data	N/A	N/A	293,000	325,000	N/A
TOTAL - SURVEYS - Continuing	14,754,000 [1]	6,027,000 [1]	3,820,000	2,863,000	2,662,000 [1]

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[1] Excludes Collection and Study of Basic Data which is a continuing program.

APPROPRIATION TITLE: Flood Control, Mississippi River and Tributaries, AR, IL, KY, LA, MS, MO, and TN, General Investigations, Fiscal Year 1996

Study	Total Estimated Federal Cost ($)	Allocation Prior to FY 1995 ($)	Allocation FY 1995 ($)	Tentative Allocation FY 1996 ($)	Additional to Complete After FY 1996 ($)

3. PRECONSTRUCTION ENGINEERING AND DESIGN ACTIVITIES (PED) - NEW START - None.

4. PRECONSTRUCTION ENGINEERING AND DESIGN ACTIVITIES (PED) - CONTINUING

a. Navigation: None.

b. Flood Control: The amount of $2,400,000 is requested for the continuation of two studies.

ARKANSAS

Eastern Arkansas Region Comprehensive Study (Grand Prairie Area General Reevaluation)	10,000,000	4,312,000	3,000,000	2,200,000	488,000

The study area, which is located in the alluvial valley of the Mississippi River, includes the drainage basins of Bayou Meto, Lower White River, Cache River, Big Creek, L'Anguille River and the St. Francis River in eastern Arkansas. The area includes all or part of 24 counties in eastern Arkansas, a 13,400 square mile area which represents 25 percent of the land area of the state. The study is a multipurpose study with primary emphasis on agricultural water supply, conservation, and fish and wildlife enhancement. The major problem identified is the depletion of the alluvial aquifer, which provides essentially all the water used for agricultural irrigation. Depletion of the alluvial aquifer is threatening the future of agriculture as it is presently practiced in the region. The aquifer has been exhausted to only the perennial yield in parts of the area, and if current irrigation trends continue, this life sustaining natural resource could be completely lost. This would also result in a catastrophic economic loss to the area, region, and nation. A draft feasibility report was submitted to the Mississippi River Commission in December 1990; however, the study was discontinued at that time and review of the report was never completed due to its recommendations being in conflict with Corps policy. The feasibility study identified five separate agricultural water supply and conservation plans. These were for the Grand Prairie, the Black River, the Little Red River, the White River, and the Bayou Meto areas. The plans range in cost from approximately $12 million to $506 million with benefit-cost ratios ranging from 1.0 to 5.1. The Appropriation Acts for Fiscal Years 1992, 1993, 1994, and 1995 directed the Corps to select and develop implementation plans for one area to serve as a demonstration project for agricultural water supply. The Grand Prairie area was selected. The plan identified in the feasibility report for the Grand Prairie area was estimated to cost $194 million and consists of a major pumping station and a network of new and improved channels with associated structures that would provide interbasin transfer of surface water to the water depleted areas. Included as an integral part of the plan are conservation measures, groundwater management strategies, on-farm storage reservoirs and fish and wildlife measures. Based on the unapproved economic analysis performed during the feasibility study (December 1990), the average annual benefits are estimated at $25 million, all for agricultural supply, with a benefit-cost ratio of 1.15 to 1. Significant additional benefits for fish and wildlife enhancement were not included in this analysis. The White River Regional Irrigation Water Distribution District, the identified project sponsor for the Grand Prairie area project, has provided formal correspondence stating their commitment and support of the project.

APPROPRIATION TITLE: Flood Control, Mississippi River and Tributaries, AR, IL, KY, LA, MS, MO, and TN, General Investigations, Fiscal Year 1996

Study	Total Estimated Federal Cost ($)	Allocation Prior to FY 1995 ($)	Allocation FY 1995 ($)	Tentative Allocation FY 1996 ($)	Additional to Complete After FY 1996 ($)

The project is not authorized for construction. If authorized for implementation, the project would be cost shared in accordance with the provisions of the Water Resources Development Act of 1986 as amended.

Fiscal Year 1995 funds are being used to continue the general reevaluation for the Grand Prairie area. Fiscal Year 1996 funds will be used to continue work on the general reevaluation for the Grand Prairie area. Preconstruction engineering and design was initiated in Fiscal Year 1992. Preconstruction engineering and design studies for the Grand Prairie Area general reevaluation will be completed and a draft report will be prepared in March 1997.

Lower White River, AR (Big Creek & Tributaries)	3,500,000	,760,000	371,000	200,000	169,000

The project is located in eastern Arkansas in St. Francis, Lee, Monroe, and Phillips Counties. The drainage basin is about 55 miles long with a maximum width of 29 miles and has a total area of about 1,060 square miles. Big Creek empties into the White River at mile 51.9. Big Creek and its tributaries have become clogged with debris and vegetative growth. The authorized plan consists of enlargement and minor realignment of 132 miles of Big Creek and its tributaries. Studies were suspended in 1976 after the plan was presented to the public where a number of conflicting views were presented that could not be resolved. A reevaluation study was initiated in FY 1988 at the request of the Big Creek Improvement District to identify a balanced plan of improvement that would provide flood control for the basin and avoid adverse impacts to the environment. The results of the basin wide investigation indicated that no feasible or acceptable flood control alternatives could be found for the eleven tributaries of Big Creek. The investigation of flooding problems along the main stem of Big Creek is continuing. The Big Creek Improvement District is the potential local sponsor for basin wide flood control alternatives. The study also includes an investigation of flooding problems in Brinkley, Arkansas. A flood control alternative has been identified for Brinkley that includes a two mile earthen levee and pumping station. The plan would provide at least a 100-year level of protection and it is supported by the city of Brinkley.

The project was authorized for construction by the Flood Control Act of 1965. The total cost estimate for the authorized project is $74,200,000 (October 1994 price level). The Federal and non-Federal estimated costs are $55,400,000 and $18,800,000, respectively. The benefit-to-cost ratio is 2.1 to 1 based on the latest economic analysis dated March 1974. The project would be cost shared in accordance with financing concepts reflected in Public Law 99-662 which would require the non-Federal sponsor to provide lands, easements, rights-of-way, relocations and disposal areas, presently estimated at $13,283,000; make a cash contribution of not less than 5 percent of the costs allocated to flood control presently estimated at $3,710,000; and bear all costs of operation, maintenance and replacements, presently estimated at $220,000 annually.

Fiscal Year 1995 funds are being used to continue the study of basin wide flooding problems. Fiscal Year 1996 funds will be used to complete the investigation of basin wide flooding, prepare the General Reevaluation Report, and the Project Management Plan. The Preconstruction Engineering and Design phase is currently scheduled for completion in September 1997.

APPROPRIATION TITLE: Flood Control, Mississippi River and Tributaries, AR, IL, KY, LA, MS, MO, and TN, General Investigations, Fiscal Year 1996

Study	Total Estimated Federal Cost ($)	Allocation Prior to FY 1995 ($)	Allocation FY 1995 ($)	Tentative Allocation FY 1996 ($)	Additional to Complete After FY 1996 ($)
c. Shoreline Protection: None.					
d. Multiple Purpose Power: None.					
TOTAL - PRECONSTRUCTION ENGINEERING AND DESIGN ACTIVITIES - NEW AND CONTINUING	13,500,000	7,072,000	3,371,000	2,400,000	657,000
GRAND TOTAL - SURVEYS AND PRECONSTRUCTION ENGINEERING AND DESIGN ACTIVITIES	28,254,000	13,099,000	7,191,000	5,263,000	3,319,000

APPROPRIATION TITLE: Flood Control, Mississippi River and Tributaries, AR, IL, KY, LA, MO MS, & TN - Construction

PROJECT: Mississippi River and Tributaries, Arkansas, Illinois, Kentucky, Louisiana, Mississippi, Missouri and Tennessee (Continuing)

LOCATION: The comprehensive project for Flood Control, Mississippi River and Tributaries will provide flood protection for the alluvial valley of the Mississippi River from Cape Girardeau, Missouri, to the Head of Passes, Louisiana; and for improvement of the Mississippi River for navigation from Cairo, Illinois, to Baton Rouge, Louisiana. It includes the main river, the basins of the St. Francis, White, Arkansas, Tensas, Red, Yazoo and Atchafalaya Rivers, the alluvial lands around Lake Pontchartrain, and the tributary streams in Western Tennessee and Kentucky. The completed project will provide protection against a project design flood, which will amount to a flow of 2,360,000 cubic feet per second at Cairo, Illinois, and 3,030,000 cubic feet per second at the latitude of Old River above Baton Rouge, Louisiana. This flow will divide near this point with 1,530,000 cubic feet per second doing down the Atchafalaya River and the West Atchafalaya and Morganza Floodways. The remaining 1,500,000 cubic feet per second will continue down the Mississippi River to a point above New Orleans, where 250,000 cubic feet per second will be diverted through the Bonnet Carre' Spillway to Lake Pontchartrain. The flow past New Orleans to the Gulf of Mexico will then be 1,250,000 cubic feet per second, which is the river's safe capacity.

The control of this large quantity of water will be accomplished by every practical means of flood control, especially reservoirs, levees, cutoffs, revetments, and floodways.

The justification of the funds requested is presented on separate sheets for each major feature of the project. These major features are termed "project" for the purposes of reporting, accounting and fiscal control, and where appropriate, are further separated into their separable units.

AUTHORIZATION: Flood Control Act of 1928, as amended.

	SUMMARIZED FINANCIAL DATA	ACCUM. PCT. OF EST. FED. COST
Total Estimated Federal Cost	$ 11,312,655,000	
Allocations to 30 September 1994	6,002,872,000	
Allocations for FY 1995	219,427,000	
Allocations through FY 1995	6,222,299,000	55
Allocations Requested for FY 1996	220,340,000	57
Programmed Balance to Complete after FY 1996	3,897,546,312	
Unprogrammed Balance to Complete after FY 1996	972,469,688	

COMPARISON OF FEDERAL COST ESTIMATES; **The current Federal Cost estimate of $11,312,655,000 for the Mississippi River and Tributaries project is a decrease of $94,409,000 from the latest estimate ($11,407,064,000) submitted to Congress (FY 1995). Detail of the changes for features included in the FY 1996 budget request are shown under the individual features on the following pages of the Justification Data.**

APPROPRIATION TITLE: Flood Control, Mississippi River and Tributaries, AR, IL, KY, LA, MS, MO, TN - Construction

PROJECT: Mississippi River Levees, Arkansas, Illinois, Kentucky, Louisiana, Mississippi, Missouri and Tennessee (Continuing)

LOCATION: The Mississippi River Levee system on the west bank extends from Allenville, Missouri, on the Little River Diversion Channel generally southward to the vicinity of Venice, Louisiana, and on the east bank from Hickman, Kentucky, to opposite Venice, Louisiana, except where interrupted by hills and tributary streams. Included in the system are the levees which protect Mounds, Mound City and Cairo, Illinois, and the New Madrid Levee and Floodway.

DESCRIPTION: The plan of improvement provides for raising, strengthening, and in some cases, extending existing levees to provide protection against the project flood. This feature includes 1,519.5 miles of levees and 14.8 miles of floodwall. All work is programmed.

AUTHORIZATION: Flood Control Acts of 1928, 1936, 1938, 1941, 1946, 1950, 1954, 1962, 1965, 1968, and PL 92-222.

REMAINING BENEFIT-REMAINING COST RATIO: 25.1 to 1 at 2-1/2 percent. The benefit-cost ratio is based on all features which comprise the Main Stem system of the Mississippi River and Tributaries project.

TOTAL BENEFIT-COST RATIO: 7.9 to 1 at 2-1/2 percent.

INITIAL BENEFIT-COST RATIO: This project feature of the Main Stem system was authorized in Fiscal Year 1928 and initial construction funds were provided in Fiscal Year 1928. The authorized comprehensive review of the Mississippi River and Tributaries project, contained in House Document 308/88/2, as updated to reflect 1965 conditions and price levels, is considered to be the base estimate for the Main Stem system. The benefit-cost ratio for the Main Stem components computed for the base estimate was 7.9 to 1.

BASIS OF BENEFIT-COST RATIO: Benefits are from the latest available evaluation approved in December 1994 at 1979 price levels. The latest comprehensive analysis was conducted in 1974. The 1979 analysis is the same as the 1974 analysis except that certain overall undocumented benefit categories were eliminated and 1979 prices were used. To use the 1974 analysis would have the effect of further increasing the benefit-cost ratio.

SUMMARIZED FINANCIAL DATA			ACCUM. PCT. OF EST. FED. COST
Estimated Total Appropriation Requirement		$1,341,000,000	
Future Non-Federal Reimbursement		674,000	
Estimated Federal Cost (Ultimate)		1,340,326,000	
Estimated Non-Federal Cost		$ 67,048,000	
Cash Contributions	$ 884,000		
Other Costs	65,490,000		
Reimbursement	674,000		
Recreation Facilities $674,000			
Total Estimated Project Cost		$1,407,374,000	
Allocations to 30 September 1994		$ 722,088,000	
Conference Allowance for FY 1995		24,255,000	
Allocation for FY 1995		23,866,000 [1]	
Allocations through FY 1995		745,954,000	56
Allocation Requested for FY 1996		$ 32,450,000	58
Programmed Balance to Complete After FY 1996		562,596,000	
Unprogrammed Balance to Complete After FY 1996		0	

STATUS: (1 January 1995)	PERCENT COMPLETE	PHYSICAL COMPLETION SCHEDULE
Entire Project	90	Being Determined

PHYSICAL DATA

Channel and Canals	72 miles
Levees:	
Average Height	20-35 feet
Length	1,519.5 miles
Floodwalls:	
Average Height	14-23 feet
Length	14.8 miles
Levee Berms	637.8 miles
Levee Roads	1,500.0 miles
Pumping Stations	5

[1] Reflects $2,389,000 reduction assigned as savings and slippage and $2,000,000 reprogrammed to the project.

Mississippi River Commission | Memphis, Vicksburg, and New Orleans Districts | Mississippi River Levees, AR, IL, KY, LA, MS, MO, and TN

6 February 1995

JUSTIFICATION: The Mississippi River Levees project is one of the Main Stem components which comprise the plan of improvement for the control of floods on the Mississippi River. The contribution of each element to the overall plan is inseparably related to that made by the others. Therefore, their benefits are inseparable and a composite benefit-cost ratio for the Main Stem components is necessary. The components are: Mississippi River Levees, Channel Improvement, South Bank Arkansas and South Bank Red River Levees, the Atchafalaya Basin, Atchafalaya Floodway System, Old River and a few miscellaneous items.

The Mississippi River Levee System provides protection to 23,620 square miles and partial protection to an additional 3,780 square miles in the alluvial valley subject to flooding by the project flood. The alluvial valley is over 650 miles long and varies in width from 20 to 90 miles. Numerous railroads, highways, and airfields connecting the major transportation centers lie within the protected area as do several major transcontinental communication routes. In addition to the vast highly developed and productive agricultural areas, the levees afford protection to urban areas and many large and varied industries whose products have a vital bearing on the welfare, economy, and defense capabilities of this country.

The value of lands and improvements protected by authorized works against the design flood is $120.9 billion in 1994 dollars. This consists of 226,000 residential acres which include the City of New Orleans, 45,000 acres of commercial lands, 10 million acres of agricultural lands, and 6.5 million acres of woodland and marshland. The area subject to flooding by the project flood assuming no protective works is 22.7 million acres. The area that will be provided complete protection by the completed project is 15.1 million acres.

The maximum flood of record for the Main Stem System was the 1927 flood which overflowed about 26,000 square miles, caused the deaths of 214 people, rendered 637,000 people temporarily homeless, and caused property damages of $236.3 million. This would be equivalent to $4.6 billion damages in 1994 prices.

The next flood of magnitude was the 1973 flood which overflowed 16,875 square miles (10.8 million acres), caused the death of 28 people, and displaced approximately 45,300 persons. The deaths and displacements of persons would have been significantly higher without the project in place. Without Federal projects, approximately 19.8 million acres would have been inundated. Total damages with existing projects in operation were $643 million (1973 price levels). Damages without projects would have been $11.3 billion and total damages prevented by projects amounted to $10.6 billion. Expressed in 1994 prices, damages without the projects would have been $36.8 billion and damages prevented would have been $32.9 billion.

The benefit-cost ratio was derived by measuring the total benefits credited to those Main Stem components against their total cost. Average annual benefits for the composite of Main Stem features are as follows:

Annual Benefits	Amount
Flood Control	$2,618,860,000
Navigation	790,162,000
Area Redevelopment	9,035,000
Recreation	3,018,000
Total	$3,421,075,000

FISCAL YEAR 1996: The requested amount will be applied as follows:

Initiate:	
Gammon, AR, Seepage Berm	$ 1,000,000
Cairo Floodwall Seepage Control	20,000
Above Cairo, IL, Berm, Parcel 1	10,000
Island No. 8, KY, Berm	10,000
Below Charleston, MO, Berm	100,000
Nash, MO, Levee Stability	100,000
Nash, MO, Relief Wells, Parcel 3	900,000
Powers Island, MO, Berm, Parcel 1	100,000
Stateline - Wilson Point, LA, Item 506-R	400,000
Wilson Point - Lookout Point, LA, Item 489-R	351,000
Tallulah - Magna Vista, MS, Berm, Item 475-LA	600,000
Romeville - Remy, LA, Levee Enlargement, Mile 163 to Mile 150-L	220,000
Remy - Garyville, LA, Levee Enlargement, Mile 150 to Mile 142-L	220,000
Plaquemines West 2nd Lift Levee Enlargement, Mile 66 to Mile 52.8-R	220,000
Initiate and Complete:	
Fifth Louisiana Levee District Levee Enlargement, Mile 320 to Mile 308-R	166,000
Baton Rouge Front Soil Nailing, Mile 230-L	270,000

Continue:	
Lands and Damages	$ 320,000
Surveys and Layouts	429,000
Miscellaneous Relocations	158,000
Miscellaneous Hired Labor	38,000
Cultural Resources Preservation	45,000
Nash, MO, Relief Wells, Parcel 2	1,000,000
Tiptonville, TN, Levee Extension	1,820,000
Stateline - Wilson Point, LA, Item 501-R	1,649,000
Stateline - Wilson Point, LA, Item 503-R	600,000
Carolina - Valewood, MS, Berm, Item 501-LA	300,000
Tallulah - Magna Vista, MS, Berm, Item 475-LB	1,500,000
Point Coupee' - Arbroth, LA, Seepage Control, Mile 270 to Mile 250-R	1,712,000
Brusly - Plaquemine, LA, Levee Enlargement, Mile 225 to Mile 207-R	1,558,000
Point Pleasant - White Castle, LA, Levee Enlargement, Mile 197 to Mile 194-R	1,600,000
Philadelphia Point - Donaldsonville, LA, Levee Enlargement, Mile 179 to Mile 173-R	1,074,000
Point Houmas, LA, Levee Enlargement, Mile 173 to Mile 165-R	1,431,000
Oak Alley - Willow Grove, LA, Levee Enlargement, Mile 156 to Mile 143-R	1,410,000
Point Claire - Carville, LA, Levee Enlargement, Mile 198 to Mile 180-L	1,737,000
Complete:	
Naval Reservation Levee Enlargement, Mile 93.6 to Mile 89-R	1,395,000
Garyville - LaPlace, LA, Levee Enlargement, Mile 142 to Mile 133-L	102,000
Planning, Engineering and Design	5,791,000
Supervision and Administration	2,094,000
Total	$32,450,000

NON-FEDERAL COST: In accordance with the Flood Control Acts of 1928, 1936, 1938, 1941, 1946, 1950, 1954, 1962, 1965, 1968 and PL 92-222, the non-Federal sponsor must comply with the requirements listed below:

Requirements of Local Cooperation	Payments During Construction and Reimbursements	Annual Operation, Maintenance, Repair, Rehabilitation and Replacement Costs
Provide lands, easements, rights-of-way, and borrow and excavated or dredged material disposal areas.	$65,168,000	
Minor maintenance of all flood control works after their completion, except controlling and regulating spillway structures, including special relief levees; maintenance includes normally such matters as cutting grass, removal of weeds, local drainage and minor repairs to mainline river levees.		$1,025,000
Pay one-half of the separable costs allocated to recreation (except recreational navigation) and bear all costs of operation, maintenance, repair, rehabilitation and replacement of recreation facilities.	1,558,000	141,900
Other (levee and revetment construction)	322,000	
Total Non-Federal Costs	$67,048,000	$1,166,900

STATUS OF LOCAL COOPERATION: It is estimated that local interests had spent approximately $292,000,000 for flood protection prior to the Act of 15 May 1928. After passage of the Act, the 37 levee districts along the Mississippi River adopted resolutions assuring the United States that the requirements of local cooperation will be met. These local interests have acquired all rights-of-way for work completed and underway and will try to provide the rights-of-way for work scheduled for Fiscal Year 1996. Some levee boards are having difficulty in providing rights-of-way when requested because of financial problems, even for construction work in areas where the existing levees are furtherest below the authorized grade. Supplemental assurances covering the requirements of the Uniform Relocations Assistance and Real Property Acquisition Policies Act of 1970 (PL 91-646) have been accepted for Main Stem Mississippi River Levees in Arkansas, Illinois, Kentucky, Louisiana, Mississippi, Missouri, and Tennessee.

Assurances of local cooperation for the recreation facilities at Warfield Point, Mississippi, were accepted on 14 October 1969. Supplemental assurances covering the River and Harbor Act of 1970 (PL 91-611) and PL 91-646 were accepted 7 August 1972. Assurances have not as yet been requested for the recreation facilities at Mississippi River State Park, Arkansas.

COMPARISON OF FEDERAL COST ESTIMATES: The current Federal cost estimate of $1,341,000,000 is a decrease of $25,000,000 from the latest estimate ($1,366,000,000) presented to Congress (FY 1995). This change includes the following items:

Item	Amount
Price Escalation on Construction Features	$-25,109,000
Design changes	+17,350,000
Post Contract Award and Other Estimating Adjustments	-17,350,000
Price Escalation on Real Estate	109,000
Total	$-25,000,000

STATUS OF ENVIRONMENTAL IMPACT STATEMENT: The Final Environmental Impact Statement was filed with the Council on Environmental Quality on 16 April 1976.

OTHER INFORMATION: Initial construction funds were appropriated in Fiscal Year 1928.

APPROPRIATION TITLE: Flood Control, Mississippi River and Tributaries, AR, IL, KY, LA, MS, MO and TN - Construction

PROJECT: Channel Improvement, Arkansas, Illinois, Kentucky, Louisiana, Mississippi, Missouri and Tennessee (Continuing)

LOCATION: The project is located in the Mississippi River and along its banks from the vicinity of Cairo, Illinois, to the Head of Passes, Louisiana, a distance of approximately 966 miles.

DESCRIPTION: The plan of improvement consists of stabilizing the banks of the river in a desirable alignment and obtaining the most efficient flow characteristics for it for flood control and navigation by means of revetments, dikes, foreshore protection, and improvement dredging. All work is programmed.

AUTHORIZATION: Flood Control Acts of 1928, 1936, 1938, 1941, 1944, 1962, 1965, 1966, and 1970.

REMAINING BENEFIT-REMAINING COST RATIO: 25.1 to 1 at 2-1/2 percent. The benefit-cost ratio is based on all features which comprise the Main Stem system of the Mississippi River and Tributaries project.

TOTAL BENEFIT-COST RATIO: 7.9 to 1 at 2-1/2 percent.

INITIAL BENEFIT-COST RATIO: This project feature of the Main Stem system was authorized in Fiscal Year 1928 and initial construction funds were provided in Fiscal Year 1928. The authorized comprehensive review of the Mississippi River and Tributaries project, contained in House Document 308/88/2, as updated to reflect 1965 conditions and price levels, is considered to be the base estimate for the Main Stem system. The benefit-cost ratio for the Main Stem components computed for the base estimate was 7.9 to 1.

BASIS OF BENEFIT-COST RATIO: Benefits are from the latest available evaluation approved in December 1994 at 1979 price levels. The latest comprehensive analysis was conducted in 1974. The 1979 analysis is the same as the 1974 analysis except that certain overall undocumented benefit categories were eliminated and 1979 prices were used. To use the 1974 analysis would have the effect of further increasing the benefit-cost ratio.

SUMMARIZED FINANCIAL DATA			ACCUM. PCT. OF EST. FED. COST
Estimated Federal Cost		$3,570,000,000	
Estimated Non-Federal Cost		1,786,000	
Cash Contributions	$1,693,000		
Other Costs	93,000		
Total Estimated Project Cost		$3,571,786,000	
Allocations to 30 September 1994		$2,287,051,000	
Conference Allowance for FY 1995		67,701,000	
Allocation for FY 1995		64,945,000 1/	
Allocations through FY 1995		2,351,996,000	66
Allocation Requested for FY 1996		63,090,000	68
Programmed Balance to Complete After FY 1996		1,154,914,000	
Unprogrammed Balance to Complete After FY 1996		0	

STATUS: (1 January 1995)	PERCENT COMPLETE	PHYSICAL COMPLETION SCHEDULE
Entire Project	89	Being Determined

PHYSICAL DATA

Lands and Damages	19,135 acres
Revetments	1,085 miles
Dikes	339 miles
Dredging	As required
Foreshore Protection	160 miles
Pumping Station	1

JUSTIFICATION: The Channel Improvement Project is one of the Main Stem components which comprise the plan of improvement for the control of floods on the Mississippi River. The contribution of each element to the overall plan is inseparably related to that made by the others. Therefore, their benefits are inseparable and a composite benefit-cost ratio for the Main Stem components is necessary. The components are: Mississippi River Levees, Channel Improvement, South Bank Arkansas and South Bank Red River Levees, the Atchafalaya Basin, Atchafalaya Floodway System, Old River, and a few miscellaneous items.

The Mississippi River, with a drainage area of about 1,245,000 square miles, has a wide range of flow, increasing from an approximate minimum of 90,000 cubic feet per second (675,000 gallons per second) to a maximum of

1/ Reflects $6,956,000 reduction assigned as savings and slippage and $4,200,000 reprogrammed to the project.

2,345,000 cubic feet per second (17,587,000 gallons per second) which occurred in 1927 at the latitude of Red River Landing. The project flood is 3,030,000 cubic feet per second (22,500,000 gallons per second). Part of the tremendous energy of this volume of flowing water is directed toward a relentless attack on the banks of the river, causing the unprotected banks to cave into the river. As this caving progresses, the attack becomes more direct, the bendway moves in toward the levee, and more sediment is placed in the river and deposited downstream in the form of a sandbar. This bar gradually builds out into the channel and deflects the river's attack to the opposite bank. As the cycle is repeated the river tends to meander and lengthen. Revetment is placed against the banks of the river at locations where mainline levees are being threatened with destruction or where unsatisfactory alignment and channel conditions are developing. Revetment serves a three-fold purpose in that the river is prevented from encroaching on the Main Stem levees, excess material is kept out of the stream, and a favorable channel alignment and depth are maintained. An objective of the plan is to preserve favorable alignments and efficient cross-sectional areas and to prevent the river from creating new meander patterns. In wide reaches of the river, dikes are used to contract the channel width so as to produce a single efficient channel for navigation and to insure the flood carrying capacity of the river. Chutes and secondary channels are closed for the same purpose. Improvement dredging is employed to assist the river in removing natural obstructions which deflect the current into undesirable patterns of flow and to assist in developing an efficient channel. Foreshore protection is utilized to preserve the integrity of the Mississippi River Levees from attack by erosion of the batture. Erosion of the batture leads to steep slopes which, when undermined, result in considerable loss of batture and possible failure of the levee.

The value of lands and improvements protected by the Main Stem System authorized works against the design flood is $120.9 billion in 1994 dollars. This consists of 226,000 residential acres which include the City of New Orleans, 45,000 acres of commercial lands, 10 million acres of agricultural lands, and 6.5 million acres of woodland and marshland. The area subject to flooding by project flood assuming no protective works is 22.7 million acres. The area that will be provided complete protection by the completed project is 15.1 million acres.

The maximum flood of record was the 1927 flood which overflowed about 26,000 square miles, caused the deaths of 214 people, rendered 637,000 people temporarily homeless, and caused property damages of $236.3 million. This would be equivalent to $4.6 billion in damages in 1994 prices.

The next flood of magnitude was the 1973 flood which overflowed 16,875 square miles (10.8 million acres), caused the death of 28 people, and displaced approximately 45,300 persons. The deaths and displacements of persons would have been significantly higher without the project in place. Without Federal projects, approximately 19.8 million acres would have been inundated. Total damages with existing projects in operation were $643 million (1973 price levels). Damages without projects would have been $11.3 billion and total damages prevented by projects amounted to $10.6 billion. Expressed in 1994 prices, damages without the projects would have been $36.8 billion and damages prevented would have been $32.9 billion.

The benefit-cost ratio was derived by measuring the total benefits credited to those Main Stem components against their total cost. Average annual benefits for the composite of Main Stem features are as follows:

Annual Benefits	Amount
Flood Control	$2,618,860,000
Navigation	790,162,000
Area Redevelopment	9,035,000
Recreation	3,018,000
Total	$3,421,075,000

FISCAL YEAR 1996: The requested amount will be applied as follows:

Revetments	$ 41,424,000
Dikes	21,666,000
Total	$ 63,090,000

Revetments: The planned program consists of items of work for which funds will be required as follows:

Lands and Damages	$ 140,000
Construction of Revetments	33,767,000
Cultural Resources	70,000
Planning, Engineering, and Design	6,038,000
Supervision and Administration	1,409,000
Total	$ 41,424,000

The items of revetment work are:	Approximate length in feet:
Pritchard, MO	2,000
Merriwether-Cherokee, TN	2,500
Heloise, TN	5,200
Lake Concordia, MS	2,000
Vaucluse Trenchfill, AR	12,900
Milliken Bend, LA	1,000
Diamond Point, MS-LA	1,300
Grand Gulf Upper, MS	2,100
Railroad Landing, MS	1,000
Smoke Bend, LA	2,000
Linwood, LA	2,000
Reinforcement	28,800

Dikes: The planned dike work consists of the following items:

New Madrid, MO	$ 100,000
Island 7 and 8, MO-KY	1,100,000
Kentucky Point, KY	1,400,000
Redman Point, AR	1,400,000
Rescue Landing, MS	1,750,000
Porter Lake, AR	1,600,000
Donaldson Point, MO	350,000
Shelby Forest, TN	300,000
Randolph Point, TN	300,000
Seyppel, AR	600,000
Below Williams, KY	300,000
Below Island 9, TN	300,000
Pritchard, MO	150,000
Moore Island, MO	150,000
Victoria Bendway Weirs	500,000
Tarpley Cutoff, MS	600,000
Island 84, MS	500,000
Anconia Chute, AR	800,000
Warfield Point, MS	400,000
Baleshed Landing, MS	800,000
Ajax Bar, MS	900,000
Forest Home, LA	427,000
Below Racetrack, MS	500,000
Coffee Point, LA	1,000,000
Opposite Warnicott, MS	800,000
Fritz Island, LA	600,000
Surveys and Layouts	240,000
Lands and Damages	47,000
Cultural Resources	50,000
Planning, Engineering, and Design	2,590,000
Supervision and Administration	1,112,000
Total	$21,666,000

NON-FEDERAL COST: In accordance with Section 4 of the Flood Control Act of 1944, as amended by Section 207 of the Flood Control Act of 1962, the non-Federal sponsor must comply with the requirements listed below:

Requirements of Local Cooperation	Payments during Construction and Reimbursements	Annual Operation, Maintenance, and Replacement Costs
Provide lands, easements, rights-of-way, and borrow and excavated or dredged material disposal areas	$ 93,000	
Pay one-half of the separable costs allocated to recreation (except recreational navigation) and bear all costs of operation, maintenance, and replacement of recreation facilities	1,693,000	$156,000
Total Non-Federal Costs	$1,786,000	$156,000

STATUS OF LOCAL COOPERATION: Assurances furnished by the Missouri Department of Conservation for the Dorena Recreation Facility were accepted 27 August 1971; assurances furnished by the Tennessee Department of Conservation for the Richardson Landing Recreation Facility were accepted 3 September 1976, and assurances furnished by the City of Memphis, Tennessee, for Volunteer Bicentennial Park were accepted 11 September 1975. Assurances furnished by the City of Osceola, Arkansas, for Lake Neark, Arkansas, are embodied in the contract for cost sharing approved on 19 September 1982. A Local Cooperation Agreement for the Ed Jones Boat Ramp with the State of Tennessee was signed 27 October 1988. A Local Cooperation Agreement for the Shelby Forest Boat Ramp with the State of Tennessee was signed 11 October 1990. A Local Cooperation Agreement for the Dyersburg, Tennessee, Boat Ramp with the State of Tennessee was signed 11 July 1994.

COMPARISON OF FEDERAL COST ESTIMATES: The current Federal cost estimate of $3,570,000,000 is the same as the latest estimate ($3,570,000,000) presented to Congress (FY 1995). However, the estimate includes changes to the following items:

Item	Amount
Price Escalation on Construction Features	$ 80,000
Price Escalation on Real Estate	-80,000
Total	$ 0

STATUS OF ENVIRONMENTAL IMPACT STATEMENT: The Final Environmental Impact Statement was filed with the Council on Environmental Quality on 16 April 1976.

OTHER INFORMATION: Initial construction funds were appropriated in Fiscal Year 1928.

APPROPRIATION TITLE: Flood Control, Mississippi River and Tributaries, AR, IL, KY, LA, MS, MO, and TN - Construction

PROJECT: Atchafalaya Basin, Louisiana (Continuing)

LOCATION: The project is located in south-central Louisiana below the latitude of Old River and west of and generally paralleling the Mississippi River. The Atchafalaya River flows through the middle of the basin.

DESCRIPTION: The plan of improvement consists of a leveed floodway about 15 miles wide and 110 miles long that extends generally from the latitude of Old River to the Gulf of Mexico. The upper half of the basin is divided by the leveed Atchafalaya River. The Morganza Floodway is to the east of the Atchafalaya River and has a capacity of 600,000 cubic feet per second, which is introduced into the floodway by a gated control structure. The West Atchafalaya Floodway, which is located to the west of the river, is placed into operation when the fuse plug sections are overtopped bringing flows from the river that will introduce 900,000 cubic feet per second into the lower basin. After passing through the floodways, the flood waters enter the Gulf of Mexico through the Lower Atchafalaya River at Morgan City and the Wax Lake Outlet channel constructed west of Patterson, Louisiana. The project is part of a system and all work is programmed.

AUTHORIZATION: Flood Control Acts of 1928, 1934, 1936, 1938, 1941, 1946, 1950, and 1954.

REMAINING BENEFIT - REMAINING COST RATIO: 25.1 at 2-1/2 percent. The ratio is based on all features which comprise the Main Stem System of the Mississippi River and Tributaries project.

TOTAL BENEFIT - COST RATIO: 7.9 at 2-1/2 percent.

INITIAL BENEFIT - COST RATIO: This project feature of the Main Stem system was authorized in FY 1928 and initial construction funds were provided in FY 1928. The authorized comprehensive review of the Mississippi River and Tributaries project, contained in House Document 308/88/2, as updated to reflect 1965 conditions and price levels, is considered to be the base estimate for the Main Stem system. The benefit-to-cost ratio for the Main Stem components computed for the base estimate was 7.9 to 1 (FY 1928).

BASIS OF BENEFIT - COST RATIO: Benefits are from the latest available evaluation approved in December 1994 at 1979 price levels. The latest comprehensive analysis was conducted in 1974. The 1979 analysis is the same as the 1974 analysis except that certain overall undocumented benefit categories were eliminated and 1979 prices were used. To use the 1974 analysis would have the effect of further increasing the benefit-cost ratio.

SUMMARIZED FINANCIAL DATA			ACCUM. PCT. OF EST. FED. COST
Estimated Federal Cost		$1,660,000,000	
Estimated Non-Federal Cost		8,000,000	
Cash Contributions	0		
Other Costs	8,000,000		
Total Estimated Project Cost		$1,668,000,000	
Allocations to 30 September 1994		732,912,000	
Conference Allowance for FY 1995		21,000,000	
Allocation for FY 1995		26,842,000[1]	
Allocations through FY 1995		759,754,000	46
Allocation Requested for FY 1996		27,000,000	47
Programmed Balance to Complete after FY 1996		873,246,000	
Unprogrammed Balance to Complete after FY 1996		0	

STATUS: (1 January 1995)	PERCENT COMPLETE	PHYSICAL COMPLETION SCHEDULE
Entire Project	90	Being Determined

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[1] FY 1995 allocation reflects reduction of $2,158,000 assigned as savings and slippage, $3,229,000 reprogrammed to the project, and $4,771,000 proposed reprogramming to the project.

PHYSICAL DATA

Levees:
  Average Height - 20 feet
Length - 449 miles
Relocations:
  Roads - 15 miles
  Railroads - 20 miles
Drainage Structures:

Pointe Coupee	2 gates, 10.5 by 15 feet
Melville	2 - 72-inch corrugated metal pipe with vertical lift gate
Darbonne	10-foot by 10-foot barrel with vertical lift gate
Bayou des Glaises	72-inch corrugated metal pipe with flap gate
Bayou Courtableau	2 weirs, 503 feet long
Brushy Bayou	5-foot by 6-foot barrel with vertical lift gate
Bayou Courtableau	5-barrel, each 10 feet by 15 feet with vertical lift gate
Wax Lake East	25 pipes, 5 feet in diameter with slide gates
Wax Lake West	15 pipes, 5 feet in diameter with slide gates

Lands and Damages:
  289,212 acres

Pumping Stations:
  Number - 11
  Capacity - Minimum - 50 cubic feet per second
    Maximum - 1,500 cubic feet per second
    Average - 400 cubic feet per second
Bank Stabilization:
Length - 58 miles
Floodgates:
  Charenton - Sector-gated, 45 feet wide
  East Calumet - Sector-gated, 45 feet wide
  West Calumet - Sector-gated, 45 feet wide
Channels:
  Length: 147.1 miles
Locks:
  Bayou Boeuf, 75 feet by 1,156 feet, earth chamber
  Bayou Sorrel, 56 feet by 797 feet, earth chamber
  Berwick, 45 feet by 300 feet, concrete chamber
Atchafalaya River Navigation:
  New Channel 10.1 miles
Freshwater Control Structure:
  Sherburne - dual 10-foot by 10-foot reinforced concrete box culverts with gates
  Henderson - dual 10-foot by 10-foot reinforced concrete box culverts with gates

JUSTIFICATION: The Mississippi River below Morganza Floodway is capable of carrying 1,500,000 cubic feet per second without threatening the integrity of the levees along its banks which protect densely populated areas, highly developed agricultural lands, industries, and the city of New Orleans, as well as a number of lesser populated communities. Studies indicate that the project flood against which the flood control protection works are designed will be of such magnitude that 3,030,000 cubic feet per second will pass the latitude of Old River. Since the Mississippi River below the Morganza Floodway can carry only one-half this amount, the other one-half must be diverted from the main channel. The diversion is made through the Old River Control Structure, the Old River Auxiliary Structure, and the Atchafalaya River, and through the Morganza and West Atchafalaya Floodways. In order to prevent diverted waters from spreading over the rich and highly developed agricultural lands outside of the Atchafalaya Basin, these rivers and floodways have been leveed to confine the diverted flow. In order to eliminate unnecessary damage, it is essential that the work proceed as vigorously and as expeditiously as possible. This floodway system is, for all practical purposes, a part of the main river system, in as much as the integrity of the main river system depends upon its utilization. Since this construction began, farms and industries have developed in the areas adjacent to the floodway with full confidence that they would receive protection. Therefore, overtopping or crevassing of the levees would cause far more damage than anticipated at the start of project construction.

The main protection levees in the lower reaches are deficient because of consolidation of the soft underlying soils, especially those below the latitude of Krotz Springs. Early construction of these levees to the approved grade is essential, not only for flood protection, but as a means of access for the movement of manpower and equipment to any spot threatened by floods.

The Atchafalaya Basin project, authorized in 1928, is one of the Main Stem components which comprise the plan of improvement for the control of floods on the Mississippi River. The contribution of each element to the overall plan is inseparably related to that made by the others. Therefore, their benefits are inseparable and a composite benefit to cost ratio for the Main Stem components is necessary. The components are: Mississippi River Levees, Channel Improvement, South Bank Arkansas and South Bank Red River Levees, the Atchafalaya Basin, the Atchafalaya Basin Floodway System, Old River, and a few miscellaneous items.

The value of lands and improvements protected by authorized works of the Main Stem System against the design flood is $119.4 billion in 1994 dollars. This consists of 226,000 residential acres which include the City of New Orleans, 45,000 acres of commercial lands, 10 million acres of agricultural lands, and 6.5 million acres of woodland and marshland. The area subject to flooding by project flood assuming no protective works is 22.7 million acres. The area that will be provided complete protection by the completed project is 15.1 million acres.

The maximum flood of record for the Main Stem System, was the 1927 flood which overflowed about 26,000 square miles, caused the deaths of 214 people, rendered 637,000 people temporarily homeless, and caused property damages of $236.3 million. This would be equivalent to $4.5 billion damages in 1994 prices.

The next flood of magnitude was the 1973 flood which overflowed 16,875 square miles (10.8 million acres), caused the death of 28 people, and displaced approximately 45,300 persons. The deaths and displacements of persons would have been significantly higher without the project in place. Without Federal projects, approximately 19.8 million acres would have been inundated. Total damages with existing projects in operation were $643 million (1973 price levels). Damages without projects would have been $11.3 billion and total damages prevented by projects amount to $10.6 billion. Expressed in 1994 prices, damages without the projects would have been $36.1 billion and damages prevented would have been $32.7 billion.

The benefit to cost ratio for the Main Stem System was derived by measuring the total benefits credited to those Main Stem components against their total cost. The total average annual benefits for the composite of Main Stem features are as follows:

Annual Benefits	Amount
Flood Control	$2,618,860,000
Navigation	790,162,000
Area Redevelopment	9,035,000
Recreation	3,018,000
Total	$3,421,075,000

FISCAL YEAR 1996: The requested amount will be applied as follows:

Initiate:	
Wax Lake West Levee B Levee Enlargement	$ 570,000
Teche Ridge Franklin Levee Enlargement	320,000
Initiate and Complete:	
Legoiner Revetment	650,000
Coswell Bayou Revetment	4,050,000
Alabama Bayou Revetment	7,130,000
W-91 Levee Enlargement	1,635,000
Continue:	
Revetments - Stone Bank Paving	1,100,000
Planning, Engineering & Design	7,943,000
Supervision and Administration	2,380,000
Lands and Damages	400,000
Surveys and Layouts	100,000
Cultural Resource Preservation	15,000
Complete:	
W-40 Levee Enlargement	450,000
E-64 Levee Enlargement	257,000
Total	$27,000,000

NON-FEDERAL COST: In accordance with the Flood Control Act of 15 May 1928, the non-Federal sponsor must comply with the requirements listed below.

	Payments	Annual
Operation,	During Construction and Reimbursements	Maintenance, and Replacement Costs
Requirements of Local Cooperation		
Bear the administrative costs for furnishing rights-of-way for levee and levee drainage construction; purchase maintenance equipment; and perform miscellaneous levee work.	$1,110,000	0
Agree to accept lands turned over to them under the provision of Section 4 of the Flood Control Act of 15 May 1928, and as provided in the Flood Control Act of 18 August 1941.	0	0
Bear costs for and maintain all flood control works after their completion, except controlling and regulating spillway structures, including special levees; maintenance includes normally such matters as cutting grass, removal of weeds, local drainage and minor repairs to the levees.	0	$3,700,000
For the Upper Point Coupee Loop Area, provide an interior drainage system and comply with the applicable provisions of the Uniform Relocations Assistance and Real Property Acquisition Policies Act of 1970, PL 91-646, approved 2 January 1971, and comply with the provision of Section 221 of the Flood Control Act of 1970, PL 91-611.	$6,890,000	0
Total Non-Federal Costs	$8,000,000	$3,700,000

STATUS OF LOCAL COOPERATION:

Necessary assurances for maintaining the project have been furnished by the Atchafalaya Basin Levee District; Red River, Atchafalaya and Bayou Boeuf Levee District; St. Mary Parish Government; Pointe Coupee Parish Police Jury; and the towns of Berwick and Morgan City, LA. These agencies are furnishing all requirements of local cooperation necessary for meeting present project schedules.

COMPARISON OF FEDERAL COST ESTIMATES: The current Federal cost estimate of $1,660,000,000 is a decrease of $10,000,000 from the latest estimate ($1,670,000,000) presented to Congress (FY 1995). This change includes the following items:

Item	Amount
Price Escalation on Construction Features	-$10,298,000
Design Changes	-7,019,000
Post Contract Award and Other Estimating Adjustments	7,019,000
Price Escalation on Real Estate	298,000
Total	-$10,000,000

STATUS OF ENVIRONMENTAL IMPACT STATEMENT: The final Environmental Impact Statement was filed with the Environmental Protection Agency on 20 August 1982. The final Environmental Impact Statement for the Upper Pointe Coupe Loop Area was filed with the Council on Environment Quality on 11 June 1976.

OTHER INFORMATION: Funds to initiate construction were appropriated in 1928.

APPROPRIATION TITLE: Flood Control, Mississippi River & Tributaries, AR, IL, KY, LA, MS, MO, and TN - Construction

PROJECT: Atchafalaya Basin Floodway System, Louisiana (Continuing)

LOCATION: The project is located in south-central Louisiana below the latitude of Old River and west of and generally paralleling the Mississippi River. The Atchafalaya River flows through the middle of the basin.

DESCRIPTION: The floodway is approximately 110 miles long by 15 miles wide. The plan of improvement for programmed work consists of acquisition of real estate interest, excluding minerals, in the Lower Atchafalaya Floodway for flood control purposes, environmental protection purposes, and public access. The plan of improvement for unprogrammed work consists of acquisition of real estate interest, excluding minerals, in the Lower Atchafalaya Floodway, for recreation developmental purposes and construction of several campgrounds, boat launching ramps, other recreational facilities and channels, canals, levees and floodwalls for the creation of five fish and wildlife management units. This work is unprogrammed pending a decision to initiate acquisition and construction. These project features will be considered for construction in accordance with the cost sharing and financing concepts reflected in the Water Resources Development Act of 1986.

AUTHORIZATION: Supplemental Appropriations Act, 1985, and the Water Resources Development Act of 1986.

REMAINING BENEFIT-REMAINING COST RATIO: 25.1 to 1 at 2-1/2 percent. The ratio is based on all features which comprise the Main Stem system of the Mississippi River and Tributaries project.

TOTAL BENEFIT-COST RATIO: 7.9 to 1 at 2-1/2 percent.

INITIAL BENEFIT-COST RATIO: This project feature of the Main Stem system was authorized in FY 1928 and initial construction funds were provided in 1928. The authorized comprehensive review of the Mississippi River and Tributaries project, contained in House Document 308/88/2, as updated to reflect 1965 conditions and price levels, is considered to be the base estimate for the Main Stem system. The benefit-to-cost ratio for the Main Stem components computed for the base estimate was 7.9 to 1 (FY 1928).

BASIS OF BENEFIT-COST RATIO: Benefits are from the latest available evaluation approved in December 1994 at 1979 price levels. The latest comprehensive analysis was conducted in 1974. The 1979 analysis is the same as the 1974 analysis except that certain overall undocumented benefit categories were eliminated and 1979 prices were used. To use the 1974 analysis would have the effect of further increasing the benefit-cost ratio.

SUMMARIZED FINANCIAL DATA

Estimated Federal			$164,000,000
Programmed Construction		$119,061,000	
Unprogrammed Construction		44,939,000	
Estimated Non-Federal Cost			13,000,000
Programmed Construction		0	
Unprogrammed Construction		13,000,000	
Cash Constribution	12,100,000		
Other Costs	900,000		
Total Estimated Programmed Construction Cost		119,061,000	
Total Estimated Unprogrammed Construction Cost		57,939,000	
Total Estimated Project Cost			177,000,000
			ACCUM. PCT. OF EST. FED COST
Allocations to 30 September 1994		29,945,000	
Conference Allowance for FY 1995		6,000,000	
Allocation for FY 1995		5,383,000[3]	
Allocations through FY 1995		35,328,000	22
Allocation Requested for FY 1996		5,300,000	27
Programmed Balance to Complete after FY 1996		78,433,000	
Unprogrammed Balance to Complete after FY 1996		44,939,000	

STATUS: (1 January 1995)	PERCENT COMPLETE	PHYSICAL COMPLETION SCHEDULE
Land Acquisition	11	[1]
Recreation	0	Indefinite
Management Units	0	Indefinite
Entire Project	11	[1] [2]

PHYSICAL DATA

Lands and Damages: 595,000 Acres

Relocations: 2 Pipelines

Recreation Facilities
- 3 campgrounds - developed
- 7 campgrounds - primitive
- 15 2-lane boat launching ramps

Channels, Canals, Levees & Floodwalls:
- 5 Fish and wildlife management units

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[1] Being determined.

[2] For programmed work only; remaining work is unprogrammed pending a decision to construct these features.

[3] Reflects $617,000 reduction assigned as savings.

JUSTIFICATION: The Atchafalaya Basin Floodway System features result from a comprehensive study with a view to developing a plan for the management and preservation of the water and related land resources of the Atchafalaya River Basin, Louisiana, which would include provisions for reductions of siltation, improvement of water quality, and possible improvements of the area for commercial and sport fishing. The features of the Atchafalaya Basin Floodway System are compatible with the current flood control plan, and include real estate acquisition of developmental easements over privately owned land in the floodway south of Krotz Springs, Louisiana, to ensure unhampered use of the floodway during major floods and environmental easements over the same land to protect the basin's environmental resources. Provision of additional public access and several campgrounds, boat launching ramps, and other recreational facilities are also included to allow public enjoyment of the area's unique environmental values. The system management unit feature involves making use of distinct hydrologics within the floodway to restore historical overflow conditions and thereby enhance aquatic ecosystem productivity.

The Atchafalaya Basin Floodway System project is one of the Main Stem components which comprise the plan of improvement for the control of floods on the Mississippi River. The contribution of each element to the overall plan is inseparably related to that made by the others. Therefore, their benefits are inseparable and a composite benefit to cost ratio for the Main Stem components is necessary. The components are: Mississippi River Levees, Channel Improvement, South Bank Arkansas and South Bank Red River Levees, the Atchafalaya Basin, Atchafalaya Basin Floodway System, Old River, and a few miscellaneous items.

The value of lands and improvements protected by authorized works of the Main Stem System against the design flood is $119.4 billion in 1994 dollars. This consists of 226,000 residential acres which include the City of New Orleans 45,000 acres of commercial lands, 10 million acres of agricultural lands, and 6.5 million acres of woodland and marshland. The area subject to flooding by project flood assuming no protective works is 22.7 million acres. The area that will be provided complete protection by the completed project is 15.1 million acres.

The maximum flood of record for the Main Stem System, was the 1927 flood which overflowed about 26,000 square miles, caused the deaths of 214 people, rendered 637,000 people temporarily homeless, and caused property damages of $236.3 million. This would be equivalent to $4.5 billion damages in 1994 prices.

The next flood of magnitude was the 1973 flood which overflowed 16,875 square miles (10.8 million acres), caused the death of 28 people, and displaced approximately 45,300 persons. The deaths and displacements of persons would have been significantly higher without the project in place. Without Federal projects, approximately 19.8 million acres would have been inundated. Total damages with existing projects in operation were $643 million (1973 price levels). Damages without projects would have been $11.3 billion and total damages prevented by projects amount to $10.6 billion. Expressed in 1994 prices, damages without the projects would have been $36.1 billion and damages prevented would have been $32.7 billion.

The benefit to cost ratio was derived by measuring the total benefits credited to those Main Stem components against their total cost. Average annual benefits for the composite of Main Stem features are as follows:

Annual Benefits	Amount
Flood Control	2,618,860,000
Navigation	790,162,000
Redevelopment	9,035,000
Recreation	3,018,000
Total Annual Benefits	3,421,075,000

FISCAL YEAR 1996: The requested amount will be applied as follows:

Continue	
Lands and Damages	$4,775,000
Planning, Engineering and Design for Management Units	300,000
Planning, Engineering and Design for Recreation Unit	225,000
Total	$5,300,000

NON-FEDERAL COST: In accordance with the cost sharing and financing concepts reflected in the Water Resources Development Act of 1986, the non-Federal sponsor must comply with the requirements listed below.

Requirements of Local Cooperation	Payments During Construction and Reimbursements	Annual Operation, Maintenance, Repair, Rehabilitation and Replacement Costs
Pay one-half of the separable cost allocated to recreation and bear all costs of operation, maintenance, and replacements of recreation facilities.	$12,100,000	$520,500
Provide lands, easements, rights-of-way, and dredged material disposal areas for recreation.	900,000	0
Bear all costs of operation and maintenance of Fish and Wildlife Management Units.	0	70,788
Total Non-Federal Costs	$13,000,000	$591,288

STATUS OF LOCAL COOPERATION: There is no non-Federal cost associated with the presently programmed work. The State of Louisiana agreed to provide a letter of interest supporting the recreation feature of the project and agrees to its cost sharing requirements. In the event a decision is made to implement the unprogrammed features of the project, local cooperation agreements in accordance with the cost sharing and financing concepts reflected in the Water Resources Development Act of 1986 will be obtained prior to the initiation of construction. The State of Louisiana designated the Department of Natural Resources in regard to land acquisition and land management and the Department of Culture, Recreation, and Tourism in regard to the construction of recreation facilities to represent the State as local assuring agencies. Cost sharing is required for the management of Fish and Wildlife enhancement features being provided under the current land acquisition program.

COMPARISON OF FEDERAL COST ESTIMATES: The current Federal cost estimate of $164,000,000 is an increase of $12,000,000 from the latest estimate ($152,000,000) presented to Congress (FY 1995). This change includes the following items.

Item	Amount
Price Escalation on Construction Features	$ 300,000
Price Escalation on Real Estate	23,700,000
Post Contract Award and Other Estimating Adjustments	- 12,000,000
Total	$12,000,000

STATUS OF ENVIRONMENTAL IMPACT STATEMENT: The final Environmental Impact Statement was filed with the Environmental Protection Agency on 20 August 1982.

OTHER INFORMATION: Funds to initiate construction were appropriated in FY 1985.

SUMMARIZED FINANCIAL DATA (Land Acquisition)

Estimated Federal Cost			$114,600,000
Programmed Construction		$114,600.000	
Unprogrammed Construction		0	
Estimated Non-Federal Cost			0
Programmed Construction			
Unprogrammed Construction	0		
Cash Contribution	0		
Other Costs	0		
Total Estimated Programmed Construction Cost			$114,600,000
Total Estimated Unprogrammed Construction Cost			
0			
Total Estimated Project Cost			$114,600,000

SUMMARIZED FINANCIAL DATA (Recreation)

Estimated Federal Cost			$ 13,000,000
Programmed Construction		$ 225,000	
Unprogrammed Construction	$12,775,000		
Estimated Non-Federal Cost			$ 13,000,000
Programmed Construction		0	
Cash Contributions	0		
Other Costs	0		
Unprogrammed Construction		$ 13,000,000	
Cash Contributions	$12,100,000		
Other Costs	$ 900,000		
Total Estimated Programmed Construction Cost			$ 225,000
Total Estimated Unprogrammed Construction Cost			
$25,775,000			

Total Estimated Estimated Project Cost		$26,000,000
SUMMARIZED FINANCIAL DATA (Management Units)		
Estimated Federal Cost		$36,400,000
Programmed Construction	$ 4,236,000	
Unprogrammed Construction	$ 32,164,000	
Estimated Total Federal Cost		0
Programmed Construction	0	
Unprogrammed Construction	0	
Total Estimated Programmed Construction Cost		$ 4,236,000
Total Estimated Unprogrammed Construction Cost $32,164,000		
Total Estimated Estimated Project Cost		$36,400,000

APPROPRIATION TITLE: Flood Control, Mississippi River and Tributaries, AR, IL, KY, LA, MS, MO and TN - Construction

PROJECT: Eight Mile Creek, Arkansas (Continuing)

LOCATION: The project is located in Greene and Craighead Counties in northeastern Arkansas approximately 90 miles northwest of Memphis, Tennessee. The city of Paragould, Arkansas, is drained by Eight Mile Creek.

DESCRIPTION: The project provides for 12.4 miles of channel improvement. There are 4.4 miles within the city limits of Paragould, Arkansas, with the remaining 8.0 miles providing a downstream outlet for the city. All work is programmed.

AUTHORIZATION: 1985 Supplemental Appropriations Act and the Water Resources Development Act of 1986.

REMAINING BENEFIT-REMAINING COST RATIO: 2.1 to 1 at 8-1/8 percent.

TOTAL BENEFIT-COST RATIO: 1.5 to 1 at 8-1/8 percent.

INITIAL BENEFIT-COST RATIO: 1.2 to 1 at 8-1/8 percent (FY 1985).

BASIS OF BENEFIT-COST RATIO: Benefits are from the latest available reevaluation dated May 1994 at 1993 price levels.

SUMMARIZED FINANCIAL DATA

Estimated Federal Cost			$ 8,620,000
Programmed Construction		$8,620,000	
Unprogrammed Construction		0	
Estimated Non-Federal Cost			$ 5,280,000
Programmed Construction		$5,280,000	
Cash Contributions	$ 695,000		
Other Costs	4,585,000		
Estimated Non-Federal Cost			
Unprogrammed Construction		0	
Total Estimated Programmed Construction			$13,900,000
Total Estimated Unprogrammed Construction			0
Total Estimated Project Cost			$13,900,000

STATUS (1 January 1995)	PERCENT COMPLETE	PHYSICAL COMPLETION SCHEDULE
Entire Project	0	Being Determined

PHYSICAL DATA

Lands and Damages: 180 acres Commercial/Residential

Relocations:

Roads	7	bridges
Railroads	2	bridges

Channels: 12.4 miles

SUMMARIZED FINANCIAL DATA		ACCUM. PCT. OF EST. FED. COST
Allocations to 30 September 1994	$ 2,068,000	
Conference Allowance for FY 1995	0	
Allocation for FY 1995	0	
Allocation through FY 1995	2,068,000	24
Allocation Requested for FY 1996	580,000	31
Programmed Balance to Complete after FY 1996	5,972,000	
Unprogrammed Balance to Complete after FY 1996	0	

JUSTIFICATION: Eight Mile Creek provides drainage primarily for the city of Paragould, Arkansas. A 100-year flood would cause expected annual damages of $2,400,000 (October 1994 price levels). The project will provide 100-year protection in the urban area of Paragould and maintain current 3-year protection levels in the downstream rural area. Flooding impacts 1,750 residential and commercial structures and contents within the 100-year flood plain. The structures and contents have a value of approximately $150,766,000 (October 1994 price levels). Total damage from a 100-year flood is estimated at approximately $24,942,000 (October 1994 price levels). Average annual damage for such properties with the project is $159,000 (October 1994 price levels). Flooding has occurred to some extent on an annual basis. Major floods occurred in 1973, 1974, 1980, and 1991. The plan of improvement addresses the need for flood damage reduction without significant detriment to the natural environment. Total average annual benefits, all for flood control are $2,260,000.

FISCAL YEAR 1996: The requested amount will be applied as follows:

Initiate:	
Item 1, Reach 1, Channel, Miles 4.00 - 8.54	$366,000
Planning, Engineering and Design	124,000
Supervision and Administration	90,000
Total	$580,000

NON-FEDERAL COST: In accordance with the cost sharing and financing concepts reflected in the Water Resources Development Act of 1986, the non-Federal sponsor must comply with the requirements listed below.

Requirements of Local Cooperation	Payments During Construction and Reimbursement	Annual Operation, Maintenance, Repair, Rehabilitation, and Replacement Costs
Provide lands, easements, rights-of-way, and dredged material disposal areas.	$3,567,000	
Modify or relocate, utilities, roads, bridges (except railroad bridges), and other facilities where necessary for the construction of the project.	1,018,000	
Pay 5 percent of the costs allocated to flood control to bring the total non-Federal share of flood control costs to 25 percent, and bear all costs of operation, maintenance, repair, rehabilitation and replacement of flood control facilities.	695,000	$21,000
Total Non-Federal Costs	$5,280,000	$21,000

The non-Federal sponsor has agreed to make all required payments concurrently with project construction.

STATUS OF LOCAL COOPERATION: Paragould city officials have expressed a renewed interest in constructing the project. The Limited Reevaluation Report and Financing Plan were approved 12 January 1995. The city of Paragould will finance the project by rights-of-way donations, utility donations, and by using revenues generated by the existing city tax base. The city already has letters of intent from landowners for the majority of rights-of-way and letters of intent to donate from utility owners. City officials have identified sufficient funds in current annual tax revenue which can be used to meet project cash and other requirements. The Project Cost Sharing Agreement with the city is scheduled for execution in October 1995.

COMPARISON OF FEDERAL COST ESTIMATES: The current Federal cost estimate of $8,620,000 is a decrease of $1,210,000 over the latest estimate ($9,830,000) presented to Congress (FY 1990). This change includes the following items:

Item	Amount
Price Escalation on Construction Features	$ 1,130,000
Design Changes	- 2,340,000
Total	- $ 1,210,000

STATUS OF ENVIRONMENTAL IMPACT STATEMENT: An environmental assessment/FONSI was completed as part of the August 1988 General Design Memorandum. A cultural resources field survey indicates that some cultural resource sites are located in the project vicinity. The project will not impact any of the sites. There are no endangered species in the project area. Water quality certification was granted by the State of Arkansas in January 1988.

OTHER INFORMATION: Funds to initiate construction were appropriated in FY 1985.

APPROPRIATION TITLE: Flood Control, Mississippi River and Tributaries, AR, IL, KY, LA, MS, MO, and TN - Construction

PROJECT: St. Francis Basin, Arkansas and Missouri (Continuing)

LOCATION: The project is located in the St. Francis Basin in southeastern Missouri and northeastern Arkansas, and extends from the hills southwest of Cape Girardeau, Missouri, near Wappapello, Missouri, to the confluence of the St. Francis and Mississippi Rivers about 10 miles above Helena, Arkansas.

DESCRIPTION: The project provides for protection against headwater floods by means of a detention reservoir at Wappapello, MO, improvement of the flood-carrying capacities of the St. Francis and Little Rivers and their principal tributaries by means of levees, channel improvements, new channels, auxiliary channels, and floodways, including the main ditches in the Little River Basin. Protection against backwater flooding of the Mississippi River is provided by realignment of the St. Francis River channel supplemented with auxiliary channels, levee construction, and a pumping plant and floodgate. All work is programmed.

AUTHORIZATION: Flood Control Acts of 1928, 1936, 1938, 1941, 1944, 1946, 1950, 1958, 1965, and 1968 and Water Resources Development Act of 1974.

REMAINING BENEFIT - REMAINING COST RATIO: 2.6 to 1 at 2-1/2 percent.

TOTAL BENEFIT - COST RATIO: 3.5 to 1 at 2-1/2 percent.

INITIAL BENEFIT - COST RATIO: This project feature was authorized in Fiscal Year 1928 and initial construction funds were provided in Fiscal Year 1938. The authorized comprehensive review of the Mississippi River and Tributaries project, contained in House Document 308/88/2, as updated to reflect 1965 conditions and price levels, is considered to be the base estimate for the project. The benefit-cost ratio for the St. Francis Basin components computed for the base estimate was 2.4 to 1.

BASIS OF BENEFIT - COST RATIO: Benefits are from the latest available evaluation approved in July 1985 at 1983 price levels.

SUMMARIZED FINANCIAL DATA

Estimated Federal Cost		$381,000,000
Estimated Non-Federal Cost		1,876,000
Cash Contribution	$ 263,000	
Other Costs	1,613,000	
Total Estimated Project Cost		$382,876,000

STATUS (1 January 1995)	PERCENT COMPLETE	PHYSICAL COMPLETION SCHEDULE
Big Slough and Mayo Ditch	100	
Wappapello Lake	100	
Little River Drainage	95	[1]
St. Francis River and Tributaries	87	[1]
Entire Project	89	[1]

SUMMARIZED FINANCIAL DATA

		ACCUM. PCT. OF EST. FED. COST
Allocations to 30 September 1994	$325,777,000	
Conference Allowance for FY 1995	8,016,000	
Allocation for FY 1995	8,684,000[2]	
Allocations through FY 1995	$334,461,000	88
Allocation Requested for FY 1996	$10,000,000	90
Programmed Balance to Complete After FY 1996	36,539,000	
Unprogrammed Balance to Complete After FY 1996	0	

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[1] Being determined.

[2] Reflects $824,000 reduction assigned as savings and slippage and $1,492,000 reprogrammed to the project.

PHYSICAL DATA

Levees:
Average Height - 11.7 feet
Length - 438.0 miles

Relocations:
Roads - 21.3 miles and 296 bridges

Railroads - 39 bridges

Channels:
St. Francis River and Tributaries - 638 miles
Little River Drainage - 299 miles
Big Slough and Mayo Ditches - 28 miles

Dam and Reservoir: 1 - Dam
Lands and Damages: 188,927 acres
Other: 1 - Siphon

Pumping Plants:
1 - 25 cubic feet per second
1 - 12,000 cubic feet per second
1 - 700 cubic feet per second

Flood Control and Diversion Structures: 8

JUSTIFICATION:

The project is a single-purpose flood control project and is a unit in the Comprehensive Plan for Flood Control, Mississippi River and Tributaries. Protection against headwater floods of the St. Francis and Little Rivers will be afforded to an area of approximately 1,436,855 acres of agricultural lands including numerous small towns, several major railroads, highways, and utilities, located in Missouri and Arkansas. The construction of adequate outlets for the many drainage improvements undertaken by local interests will provide relief from overflow on approximately 196,700 acres in the Little River Basin, 29,000 acres in the Elk Chute Basin, and 35,000 acres in the Big Slough area. In addition, relief from flooding by backwaters of the Mississippi River is afforded to approximately 532,000 acres in the Lower St. Francis Basin below the latitude of St. Francis Lake by the Madison to Marianna Cutoff and related work including the pumping plant. Flooding has occurred every year with few exceptions, and the flood of record occurred in 1937 causing numerous breaks in the locally constructed substandard levees with resultant damages of over $2,000,000. It is estimated that the recurrence of the 1937 flood, under present conditions of development in the floodplain, would cause damages of over $56,613,000 (1994 price levels) if the flood occurred during the crop growing season. Continuing construction of this project is needed to prevent recurring flood losses. Project benefits will result from flood damages prevented, increased utilization of land, and fish and wildlife enhancement. Average annual benefits are as follows:

Annual Benefits	Amount
Flood Control	$27,439,000
Recreation	2,152,000
Fish and Wildlife	333,000

Area Redevelopment	785,000
Advance Replacement	1,807,000
Betterments	519,000
Relocation Assistance	24,000
Total	$33,059,000

FISCAL YEAR 1996: The requested amount will be applied as follows:

ST. FRANCIS RIVER AND TRIBUTARIES

Initiate:	
Main & Ditch 2, Item 1	$854,000
State Bridge, Ditch 2, Item 2, Mile 17.70	50,000
Continue:	
State Bridge, New Franklin Ditch, MO, Mile 9.60	1,196,000
Railroad Bridge, Main & Ditch 2, Mile 12.07	100,000
Ditch 13, AR	156,000
Bypass Steele, MO	1,329,000
Ditch 1, Item 3, AR	1,369,000
Miscellaneous Relocations	344,000
Lands and Damages	2,000,000
Gravel on Roadways	102,000
Complete:	
County Road, Bypass Steele, Mile 2.07	40,000
State Bridge, New Franklin Ditch, Mile 6.00	300,000
County Road, Ditch 13, Mile 0.02	69,000
County Road, Ditch 13, Mile 5.0	29,000
County Road, Ditch 13, Mile 5.9	14,000
County Road, Ditch 13, Mile 9.00	19,000
Planning, Engineering and Design	800,000
Supervision and Administration	1,130,000
Subtotal	$9,901,000

LITTLE RIVER DRAINAGE

Continue:	
Lands and Damages	$71,000
Planning, Engineering and Design	3,000
Supervision and Administration	25,000
Subtotal	99,000
Total	$10,000,000

NON-FEDERAL COST: Prior to the Flood Control Act of 1946, local interests provided lands, easements, and rights-of-way and provided for relocation of interfering facilities. After 1946, local cooperation was limited to minor maintenance of levees except for providing right-of-way for specific features, i.e., recreation facilities at the W. G. Huxtable Pumping Plant, Inter River Culvert and St. Francis Lake Control Structure. A tabulation of these and other non-federal costs is as follows:

Requirements of Local Cooperation	Payment During Construction and Reimbursements	Annual Operation, Maintenance, and Replacement Costs
Provide lands, easements, rights-of-way, and dredged material disposal areas.	$1,492,000	
Modify or relocate utilities, roads, bridges (except railroad bridges), and other facilities, where necessary for the construction of the project.	121,000	

Requirements of Local Cooperation	Payment During Construction and Reimbursements	Annual Operation, Maintenance, and Replacement Costs
Pay one-half of the separable costs allocated to recreation (except recreational navigation) and bear all costs of operation, maintenance, and replacement of recreation facilities.	85,000	
Pay all costs of minor maintenance of levees.		$888,000
Pay a portion equivalent to 6.4% of the first costs associated with the improvements in the Big Lake area for fish and wildlife enhancement.	178,000	
Total Non-Federal Costs	$1,876,000	$888,000

STATUS OF LOCAL COOPERATION: Necessary assurances have been furnished by 24 levee and drainage districts to perform minor maintenance as required by law. These agencies are furnishing all requirements of local cooperation necessary for meeting the present project schedule.

COMPARISON OF FEDERAL COST ESTIMATES: The current Federal cost estimate of $381,000,000 is the same as the latest estimate ($381,000,000) presented to Congress (FY 1995). Adjustments were made within the total cost estimate as follows:

Item	Amount
Price Escalation on Construction Features	-$1,662,000
Post Contract Award and Other Estimating Adjustments	1,557,000
Price Escalation on Real Estate	105,000
Total	$ 0

STATUS OF ENVIRONMENTAL IMPACT STATEMENT: The final Environmental Impact Statement was filed with the Council on Environmental Quality on 11 December 1973.

OTHER INFORMATION: Initial construction funds were appropriated in FY 1938.

APPROPRIATION TITLE: Flood Control, Mississippi River and Tributaries, AR, IL, KY, LA, MS, MO, and TN - Construction

PROJECT: Tensas Basin, Arkansas and Louisiana (Continuing)

LOCATION: The Tensas Basin is located in the alluvial valley of Arkansas and Louisiana between the Mississippi River on the east and an escarpment on the west and extends southward from the Arkansas River to the Red River in the vicinity of Marksville, LA.

DESCRIPTION: The Basin is comprised of two separable units--the upper portion known as the Boeuf-Tensas area and the lower portion known as the Red River backwater area. Major features in the upper Basin consist of 120.4 miles of channel and tributary improvements along the Tensas River and a 6,500 cubic foot per second pumping plant at Lake Chicot, AR. The lower basin features include 93.1 miles of levee and a 4,000 cubic foot per second pumping plant in the Tensas-Cocodrie subarea; 83.2 miles of ring levee for the Larto Lake to Jonesville subarea; construction of a 56.0-mile levee and two pumping plants (300 and 750 cubic feet per second) at Sicily Island subarea; and a 31.3-mile levee with a 500 cubic foot per second pumping plant for the Below Red River subarea. All work within the project is programmed except Tensas River (Boeuf and Tensas Rivers, Etc.), and Below Red River Area (Red River Backwater). Because of the inability of the local development authority to execute its assurances, two remaining recreation facilities at Lake Chicot have been deleted from the project. The Tensas River Project was reclassified to the inactive category in September 1990 because the project currently does not have a committed local sponsor to cost share further work on the project and there is no indication that a commitment will be made in the near future. The Below Red River Area Project was reclassified to the inactive category in May 1993 based on the lack of economic justification.

AUTHORIZATION: Flood Control Acts of 1941, 1944, 1946, 1950, 1958, 1962, 1965, 1968, and Water Resources Development Act of 1986.

REMAINING BENEFIT - REMAINING COST RATIO: 4.4 to 1 at 2-1/2 percent.

TOTAL BENEFIT-COST RATIO: 4.4 to 1 at 2-1/2 percent.

INITIAL BENEFIT - COST RATIO: 3.0 to 1 at 2-1/2 percent (FY 1967).

BASIS OF BENEFIT-COST RATIO: Benefits for the Tensas River separable element are based on General Design Memorandum Number 26 dated December 1988 at 1988 price levels. The Below Red River separable element is based on an in-house analysis conducted as part of Phase II General Design Memorandum dated May 1988 at 1988 price levels. All other project elements are based on 1974 Mississippi River and Tributaries update. Costs are based on October 1994 costs deflated to 1974 price levels.

SUMMARIZED FINANCIAL DATA

Estimated Total Apprn Requirement			$478,000,000
Programmed Construction		$364,378,000	
Unprogrammed Construction		113,622,000	
Future Non-Federal Reimbursement			1,784,000
Programmed Construction		1,784,000	
Unprogrammed Construction		0	
Estimated Federal Cost (Ultimate)			476,216,000
Programmed Construction		362,594,000	
Unprogrammed Construction		113,622,000	
Estimated Non-Federal Cost			30,728,000
Programmed Construction		2,246,000	
Cash Contribution	$ 0		
Other Costs	462,000		
Reimbursements	1,784,000		
Rec Fac $1,784,000			
Unprogrammed Construction		28,482,000	
Cash Contribution	7,403,000		
Other Costs	21,079,000		
Total Estimated Programmed Construction Cost			364,840,000
Total Estimated Unprogrammed Construction Cost			142,104,000
Total Estimated Project Cost			506,944,000

STATUS (1 January 1995)	PERCENT COMPLETE	PHYSICAL COMPLETION SCHEDULE
Boeuf and Tensas Rivers, Etc.	90	[1]
All Work Except Lake Chicot Pumping Plant	82	[1]
Lake Chicot Pumping Plant	100	Sep 1992
Tensas River Separable Element	0	Indefinite
Red River Backwater Area	65	[1]
All Work Except Tensas-Cocodrie Pumping Plant	65	[1]
Tensas-Cocodrie Pumping Plant	99	Indefinite
Below Red River Separable Element	0	Indefinite
Entire Project	89	[1]

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[1] Being determined.

		ACCUM. PCT OF EST. FED. COST
Allocations to 30 September 1994	$271,510,000	
Conference Allowance for FY 1995	7,275,000	
Allocation for FY 1995	5,527,000 1/	
Allocations through FY 1995	277,037,000	58
Allocation Requested for FY 1996	11,294,000	61
Programmed Balance to Complete After FY 1996	76,047,000	
Unprogrammed Balance to Complete After FY 1996	113,622,000	

1/ Reflects reduction of $748,000 assigned as savings and slippage and $1,000,000 reprogrammed from the project.

PHYSICAL DATA

Boeuf and Tensas Rivers, Etc.
All Work Except Lake Chicot Pumping Plant

Lands and Damages:
74,279 acres

Relocations:
Roads: 26.6 miles and 88 bridges
Railroads: 9 bridges

Channels and Canals:
1,009.3 miles

Lake Chicot Pumping Plant

Lands and Damages:
1,201 acres

Relocations:
Roads: 1 mile

Channels and Canals:
2 Weirs

Dams:
1 - 200 feet length
1 - 300 feet length

Recreation Facilities:
4 sites

Pumping Plants:
1 - 6,500 cubic feet per second

Roads:
1 - Access Road for Pumping Plant
1 - Access Road for Ditch Bayou Dam
1 - Access Road for Connerly Bayou Dam

Red River Backwater Area
All Work Except Tensas-Cocodrie Pumping Plant

Lands and Damages:
29,091 acres (includes 12,800 acres
for mitigation)

Relocations:
Roads: 28.4 miles and
5 bridges

Levees and Floodwalls:
Levees:
  Average Height: 10-25 feet
  Length: 263.6 miles
Drainage Structures: 32 (24"
  pipes to 10' x 15' box
  culverts)

Channels and Canals: 46.0 miles
All Interior Drainage except 1-1/2 miles
Smithland Cutoff

Recreation Facilities:
9 miles access road

Pumping Plants:
1-300 cubic feet per second
1-750 cubic feet per second
1-500 cubic feet per second

Fish and Wildlife:
1.1 miles diversion channel,
Two 60-inch pipe gravity structures,
1 weir

Tensas-Cocodrie Pumping Plant

Lands and Damages:
790 acres

Relocations:
Roads: 1.4 miles
and 3 bridges

Channels and Canals:
6.8 miles, 1 concrete weir, 1 earth
weir, and 1 gravity structure

Pumping Plant:
1-4,000 cubic feet per second

Fish and Wildlife Facilities:
Diversion channel
2 water control structures
3 boat-launching ramps

JUSTIFICATION: The Tensas Basin project is comprised of two separable units: the Boeuf and Tensas Rivers, which includes the Lake Chicot Pumping Plant, and the Red River Backwater Area, which includes the Tensas-Cocodrie Pumping Plant. The land in the Boeuf and Tensas River Basin possesses a high potential for agricultural production but this potential is restricted by the frequency and duration of overflow and by poor drainage which, for long periods, causes the ground to remain in a condition unsuitable for cultivation. The project will eliminate most of these hindrances and allow full economic development by providing adequate channels for the streams and major outlets for an effective local drainage system. A total of 922,000 acres (including Lake Chicot) will be substantially benefitted by the project. Lands in the Red River Backwater Area are extremely fertile but their development to full potential is adversely affected by backwaters of the Mississippi River. These lands must remain subject to use for storage of floodwaters during a Mississippi River project flood. However, protection of the area against lesser floods, particularly headwater floods of the Ouachita, Black, and Red Rivers, will permit a high degree of economic development. A total of 575,700 acres will be substantially benefitted by the project. Average annual benefits for the Tensas Basin are as follows:

Annual Benefits	Amount
Flood Control	$38,187,000
Recreation	567,000
Fish and Wildlife	416,000
Area Redevelopment	494,000
Total	$39,664,000

FISCAL YEAR 1996: The requested amount will be applied as follows:

Red River Backwater Area	
All Work Except Tensas-Cocodrie Pumping Plant	
Initiate:	
Sicily Island Levee Item 3A	$ 1,000,000
Sicily Island Levee Item 3B	1,500,000
Initiate and Complete:	
Sicily Island Utility Relocations Item 3A	194,000
Sicily Island Utility Relocations Item 3B	82,000
Continue:	
Lands and Damages	1,650,000
Sicily Island Levee Item 4A	1,070,000
Sicily Island Levee Item 4B	500,000
Fool River Pump Levee and Pumping Plant	2,381,000
Planning, Engineering, and Design	2,167,000
Supervision and Administration	750,000
TOTAL	$11,294,000

NON-FEDERAL COST: In accordance with the cost-sharing and financing concepts reflected in the initial authorization and subsequent authorized modifications of the Tensas Basin project including the Water Resources Development Act of 1986, the non-Federal sponsor must comply with the requirements listed below:

Requirements of Local Cooperation	Payments During Construction and Reimbursements	Annual Operation, Maintenance, Repair, Rehabilitation, and Replacement Costs
All Work Except Tensas River and Below Red River		
Provide lands, easements, rights-of-way, and borrow and excavated or dredged material disposal areas.	$ 462,000	
Pay one-half of the separable costs allocated to recreation (except recreational navigation) and bear all costs of operation, maintenance, repair, rehabilitation, and replacement of recreation facilities.	1,784,000	$1,367,000
Subtotal Non-Federal Costs	$2,246,000	$1,367,000

Local interests estimate that they have expended at least $5,900,000 in the Tensas Basin on the construction of drainage improvements prior to initiation of the Federal project. They estimate they will spend an additional $48,343,000 in construction on connecting ditches, main laterals, and on-farm drainage improvements. This work is being accomplished as the major outlets are opened. Local drainage and levee districts have reported that they expended approximately $5,388,032 on construction and maintenance of drainage improvements between 1950 and 1985.

Requirements of Local Cooperation	Payments During Construction and Reimbursements	Annual Operation, Maintenance, Repair, Rehabilitation, and Replacement Costs
Tensas River		
Provide lands, easements, rights-of-way, and borrow and excavated or dredged material disposal areas.	$ 8,402,000	
Modify or relocate utilities, roads, bridges (except railroad bridges), and other facilities, where necessary for the construction of the project.	10,971,000	
Pay 5 percent of the costs allocated to flood control to bring the total non-Federal share of flood control costs to 25 percent, and bear all costs of operation, maintenance, repair, rehabilitation, and replacement of flood control facilities.	3,127,000	$ 410,000
Subtotal Non-Federal Costs	$22,500,000	$ 410,000

Requirements of Local Cooperation	Payments During Construction and Reimbursements	Annual Operation, Maintenance, Repair, Rehabilitation, and Replacement Costs
Below Red River		
Provide lands, easements, rights-of-way, and borrow and excavated or dredged material disposal areas.	$ 1,706,000	
Pay 18.9 percent of the costs allocated to flood control to bring the total non-Federal share of flood control costs to 25 percent, and bear all costs of operation, maintenance, repair, rehabilitation, and replacement of flood control facilities.	4,276,000	$ 117,000
Subtotal Non-Federal Costs	$ 5,982,000	117,000
Total Non-Federal Costs	$30,728,000	$1,894,000

STATUS OF LOCAL COOPERATION:

Boeuf and Tensas Rivers, Etc.

Formal assurances have been furnished by eight levee and drainage districts to operate and maintain all units of the project except the Kirsch Lake Canal. Assurances for Lake Chicot Pumping Plant required by PL 91-611 and PL 91-646 were accepted 16 April 1976 and a cost sharing agreement with the Chicot County Rural Development Authority was executed 28 May 1976. All lands for Lake Chicot recreation development were furnished by 30 March 1976.

The local development authority, which provided assurances that it would operate and maintain Corps constructed recreation facilities in the Tensas Basin at Lake Chicot, AR, has since notified the Vicksburg District that it is unable to comply with the assurances previously furnished regarding operation and maintenance of two remaining recreation facilities, and that the two remaining facilities are not needed. The local authority has been informed that based on the fact that the two remaining facilities are not needed, all programmed construction is considered complete and payback of their cost share for construction should begin in accordance with executed assurances. The local authority has been unable to identify a source of funds to repay the debt. The matter was elevated to the Governor of Arkansas; however, since the local authority was not sanctioned by the State, the State feels no legal obligation for the payment. Alternative means for collection of the debt are being investigated.

Red River Backwater Area

Formal assurances were received 12 February 1947 and accepted 24 April 1947 for all project features except the Sicily Island Area. Assurances of local cooperation were received on 10 February 1981 and accepted 1 April 1981 for the Sicily Island Area project. The adoption of a constitutional amendment in the general election of 1 February 1972 gave the State of Louisiana and its agencies authority to comply with the Uniform Relocations Assistance and Real Property Acquisition Policies Act of 1970 (PL 91-646). Supplemental assurances covering the requirements of PL 91-646 for the Larto Lake to Jonesville Area were received 9 May 1972 and accepted 25 May 1972. Supplemental assurances covering the requirements of PL 91-646 for the Tensas-Cocodrie Levee Enlargement were received 1 February 1974 and accepted 7 February 1974. Supplemental assurances covering the requirements of PL 91-646 for the Tensas-Cocodrie Pumping Plant were received 18 August 1975 and accepted 27 August 1975.

Tensas River and Below Red River Areas

Project Cooperation Agreements for the Tensas River and Below Red River separable elements will be obtained consistent with the cost sharing and financing concepts reflected in the Water Resources Development Act of 1986. The local sponsor for the Tensas River and the Below Red River elements is the Fifth Louisiana Levee District. A draft Project Cooperation Agreement was sent to the local sponsor 2 May 1988 for review. The local sponsor indicated in October 1988 that they are unable to cost share these elements in accordance with the Water Resources Development Act of 1986. By resolution dated 15 November 1989, the Levee District has requested the East Carroll and Madison Parish Police Juries to cosponsor this project. However, no formal agreement was received from either police jury; therefore, the Tensas River separable element and the Below Red River separable element were placed in the inactive category.

COMPARISON OF FEDERAL COST ESTIMATES: The current Federal cost estimate of $478,000,000 is a decrease of $39,000,000 from the latest estimate ($517,000,000) presented to Congress (FY 1995). This change includes the following items:

Item	Amount
Price Escalation on Construction Features	$-38,682,000
Price Escalation on Real Estate Features	- 318,000
Total	$-39,000,000

STATUS OF ENVIRONMENTAL IMPACT STATEMENT: The final Environmental Impact Statement was filed with the Environmental Protection Agency on Tensas River, LA, on 18 May 1984; Lake Chicot Pumping Plant on 29 August 1975; and the Red River Backwater Area, Sicily Island Area, on 21 May 1982; Below Red River Area on 30 October 1981; Tensas-Cocodrie Pumping Plant on 24 September 1976; and Tensas-Cocodrie Levee Item on 24 September 1976.

OTHER INFORMATION: Funds to initiate construction were appropriated in FY 1947 on Red River Backwater Area and in FY 1948 on Boeuf and Tensas River, Etc.

APPROPRIATION TITLE: Flood Control, Mississippi River and Tributaries, AR, IL, KY, LA, MS, MO and TN - Construction

PROJECT: Whiteman's Creek, Arkansas - (Continuing)

LOCATION: The project is located in Craighead County in northeast Arkansas approximately 50 miles northwest of Memphis, Tennessee.

DESCRIPTION: The recommended plan of improvement consists of 6.1 miles of channel improvement within the city limits of Jonesboro, Arkansas. The plan includes channel enlargement on 2.95 miles of Higginbottom Creek; 0.72 miles of Moore's Ditch; 0.92 miles of Turtle Creek and 1.5 miles of channel enlargement and clearing and snagging on Whiteman's Creek. This plan of improvement would provide approximately a 25-year level of protection along Higginbottom Creek and a 10-year level of protection along Moore's, Turtle and Whiteman's Creeks. All work is programmed.

AUTHORIZATION: The project was authorized in the Water Resources Development Act of 1992.

REMAINING BENEFIT - REMAINING COST RATIO: 5.2 to 1 at 8 percent.

TOTAL BENEFIT-COST RATIO: 2.3 to 1 at 8 percent.

INITIAL BENEFIT - COST RATIO: 3.3 to 1 at 8-1/2 percent.

BASIS OF BENEFIT-COST RATIO: Benefits are from the Whiteman's Creek, Arkansas, feasibility report approved in April 1992 at 1991 price levels.

SUMMARIZED FINANCIAL DATA			
Estimated Federal Cost			$3,340,000
Programmed Construction		$3,340,000	
Unprogrammed Construction		0	
Estimated Non-Federal Cost			2,480,000
Programmed Construction		2,480,000	
Cash Contributions	$ 291,000		
Other Costs	2,189,000		
Estimated Non-Federal Cost			
Unprogrammed Construction		0	

STATUS (1 January 1995)	PERCENT COMPLETE	PHYSICAL COMPLETION SCHEDULE
Entire Project	20	August 1997

		ACCUM. PCT. OF EST. FED COST
Total Estimated Programmed Construction	5,820,000	
Total Estimated Unprogrammed Construction	0	
Total Estimated Project Cost	5,820,000	
Allocations to 30 September 1994	712,000	
Conference Allowance for FY 1995	720,000	
Allocation for FY 1995	646,000[1]	
Allocation through FY 1995	1,358,000	41
Allocation Requested for FY 1996	850,000	66
Programmed Balance to Complete after FY 1996	1,132,000	
Unprogrammed Balance to Complete after FY 1996	0	

PHYSICAL DATA	
Lands and Damages:	
Commercial/residential	116 acres
Transitional	10 acres
Channel Easement	51 acres
Relocations:	
Bridges	2
Utilities	50 Facilities
Channels	6.1 miles

JUSTIFICATION: The Whiteman's Creek, Arkansas, project provides drainage primarily for the City of Jonesboro, Arkansas. The project will reduce flooding in the urban area of Jonesboro and on some agricultural land on the edge of the city limits. The project will provide a 10-year level of protection along Whiteman's Creek, Turtle Creek and Moore's Ditch. Improvements along Higginbottom Creek will provide a 25-year level of protection.

Flooding impacts residential and non - residential structures and contents with a present value of $178 million (1994 price level). Average annual damages for such properties with and without project conditions are $674,000 and $1,786,000 (October 1994 price level), respectively. Flooding has occurred to some extent on virtually an annual basis over the recent past. Major floods occurred in 1969, 1980, 1983 and 1988. In addition to damages to property, disruption of vehicular traffic and the threat of injury or loss of life; flood occurrences continue to have a detrimental effect on the quality of life in the basin. The plan of improvement addresses the need for flood damage reduction without significant detriment to the natural environment. Average annual benefits, all for flood control, are $1,152,000.

FISCAL YEAR 1996: The requested amount will be applied as follows:

Initiate:	
Turtle Creek	$344,000
Whiteman's Creek	200,000
Continue:	
Higginbottom Creek	185,000
Planning, Engineering & Design	15,000
Supervision and Administration	106,000
Total	$850,000

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[1] Reflects $74,000 reduction assigned as savings and slippage.

NON-FEDERAL COST: In accordance with the cost sharing and financing concepts reflected in the Water Resources Development Act of 1986, the non-Federal sponsor must comply with the requirements listed below.

Requirements of Local Cooperation	Payments During Construction and Reimbursements	Annual Operation, Maintenance, Repair, Rehabilitation, and Replacement Costs
Provide lands, easements, rights-of-way, and borrow and excavated dredged material disposal areas.	$1,287,000	
Modify or relocate, utilities, roads, bridges (except railroad bridges), and other facilities where necessary for the construction of the project.	902,000	
Pay 5 percent of the costs allocated to flood control and bear all costs of operation, maintenance, repair, rehabilitation and replacement of flood control facilities.	291,000	$1,000
Total Non-Federal Costs	$2,480,000	$1,000

The non-Federal sponsor has also agreed to make all required payments concurrently with project construction.

STATUS OF LOCAL COOPERATION: Local interests in Craighead County, the City of Jonesboro, Arkansas State University and local drainage districts have expressed interest in the project. The City of Jonesboro has agreed to act as the project sponsor with attendant legal and financial capability. Jonesboro city officials have completed a financing plan/PCA package. The PCA package has been approved at the Washington level and the City of Jonesboro is working to execute the PCA in May 1995.

COMPARISON OF FEDERAL COST ESTIMATES: The current Federal cost estimate of $3,340,000 is the same as the latest estimate ($3,340,000) presented to Congress (FY 1995).

STATUS OF ENVIRONMENTAL IMPACT STATEMENT: An environment assessment was completed as a part of the March 1992 feasibility report. Environmental impacts of this project will be minimal because construction will be completed within the already highly developed city limits.

OTHER INFORMATION: Funds to initiate preconstruction engineering and design were appropriated in FY 1990 and funds to initiate construction were appropriated in FY 1994.

APPROPRIATION TITLE: Flood Control, Mississippi River and Tributaries, AR, IL, KY, LA, MS, MO, and TN - Construction

PROJECT: Mississippi Delta Region, Louisiana (Salinity Control Structures) (Continuing)

LOCATION: The project is located in the lower Mississippi River delta region in Plaquemines and St. Charles Parishes, Louisiana. The Caernarvon structure is located in Plaquemines Parish on the east bank of the Mississippi River in the vicinity of Caernarvon, Louisiana. The Davis Pond structure is located in St. Charles Parish on the west bank just downstream of Luling, Louisiana. The two remaining structures, located in Plaquemines Parish, are Homeplace on the west bank, and Bohemia on the east bank.

DESCRIPTION: The plan of improvement consists of four salinity control structures (Caernarvon, Davis Pond, Homeplace, and Bohemia) with appurtenant levees and channels, to divert freshwater from the Mississippi River into coastal bays and marshes for fish and wildlife restoration. The Caernarvon and Davis Pond salinity control structures are programmed, including post construction environmental monitoring which will continue for four years after completion of construction of each structure. The Homeplace and Bohemia salinity control structures are unprogrammed pending a decision to initiate construction.

AUTHORIZATION: Flood Control Act of 1965, and Water Resources Development Acts of 1974 and of 1986.

REMAINING BENEFIT - REMAINING COST RATIO: 3.4 to 1 at 3-1/4 percent for Bohemia and Caernarvon, 8-7/8 percent for Davis Pond, and 8-1/2 percent for Homeplace.

TOTAL BENEFIT - COST RATIO: 2.8 to 1 at 3-1/4 percent for Bohemia and Caernarvon, 8-7/8 percent for Davis Pond, and 8-1/2 per cent for Homeplace.

INITIAL BENEFIT - COST RATIO: 3.4 to 1 at 3-1/4 percent for Caernarvon and Bohemia (FY 1969), 3.0 to 1 at 8-1/8 percent for Davis Pond (FY 1983), and 1.5 to 1 at 8-5/8 percent for Homeplace (FY 1985).

BASIS OF BENEFIT - COST RATIO: Benefits are from the latest available evaluations: Caernarvon - approved in November 1985, at 1985 price levels; Davis Pond - approved in September 1992 at 1990 price levels; and Bohemia and Homeplace - approved in April 1962, at 1959 price levels.

SUMMARIZED FINANCIAL DATA				ACCUM. PCT. OF. EST. FED. COST
Estimated Federal Cost			$92,800,000	
Programmed Construction		$79,758,000[1]		
Unprogrammed Construction		13,042,000		
Estimated Non-Federal Cost			31,000,000	
Programmed Construction		26,600,000		
Cash Contribution	$25,633,000			
Other Costs	967,000			
Estimated Non-Federal Cost				
Unprogrammed Construction		4,400,000		
Cash Contribution	4,400,000			
Other Costs	0			
Total Estimated Programmed Construction Cost			106,358,000	
Total Estimated Unprogrammed Construction Cost			17,442,000	
Total Estimated Project Cost			123,800,000	
Allocations to 30 September 1994			28,929,520	
Conference Allowance for FY 1995			11,500,000	
Allocation for FY 1995			6,318,000[4]	
Allocations through FY 1995			35,247,520	38
Allocation Requested for FY 1996			13,300,000	52
Programmed Balance to Complete after FY 1996			31,210,480	

STATUS (1 Jan 1995)	PERCENT COMPLETE	PHYSICAL COMPLETION SCHEDULE
Caernarvon Structure	100	Sep 1995
Davis Pond Structure	0	[2]
Homeplace Structure	0	Indefinite
Bohemia Structure	0	Indefinite
Entire Project	24	[2] [3]

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[1] Includes $58,000 expended on Bohemia prior to 1970.

[2] Being determined.

[3] For programmed work only; remaining work is unprogrammed pending a decision to construct these features.

[4] Reflects $1,182,000 reduction assigned as savings and slippage, $4,000,000 reprogrammed from the project.

Unprogrammed Balance to Complete after FY 1996	13,042,000

PHYSICAL DATA

	Bohemia	Caernarvon	Davis Pond	Homeplace
Lands and Damages	2,610 acres	2,092 acres	10,213 acres	690 acres
Relocations				
Roads/Bridges	None	1,600 linear feet	2,920 linear feet	1,280 linear feet
Railroads	None	2,500 linear feet	1,390 linear feet	None
Utilities	None	4,600 linear feet	7,980 linear feet	3,680 linear feet
Fish & Wildlife Facilities				
Structures	2 tainter gates 10 feet by 30 feet 4,400 cubic feet per second	5 box culverts 15 feet by 15 feet 8,000 cubic feet per second	4 box culverts 14 feet by 14 feet 10,650 cubic feet per second	2 tainter gates 13 feet by 30 feet 4,300 cubic feet per second
Pumping Stations			1 pumping station	
Channels	5 miles	1.7 miles	2.2 miles	2 miles
Levees	10 miles	3.7 miles	16.9 miles	4 miles

JUSTIFICATION: The project will divert freshwater from the Mississippi River to coastal bays and marshes for fish and wildlife restoration. Benefits will include restoration of former ecological conditions by controlling salinity and supplementing nutrients. The bays are important to oyster production and as breeding areas for shrimp and food fishes, while the marsh areas produce natural food for fur-bearing animals and migratory waterfowl. A total of 981,500 acres of marshes and bays will be benefitted. The diversions will take place under regulated conditions developed from monitoring the impact on the environment and the fish and wildlife. Average annual benefits are as follows:

Annual Benefits	Amount
Fish and Wildlife	
Caernarvon	$ 8,706,000
Davis Pond	14,997,000
Homeplace	1,632,000
Bohemia	812,000
Recreation	
Caernarvon	449,000
Davis Pond	298,000

Total	$26,894,000

FISCAL YEAR 1996: The requested amount will be applied as follows:

Davis Pond	
Initiate:	
US Hwy 90 Relocation	$1,000,000
Diversion Structure	3,350,000
Pumping Station	300,000
Guide Levee & Rock Weir	1,318,000
Levee, Sta. 156 & 490	300,000
Continue:	
Land Acquisition	1,500,000
Utility Relocations	4,190,000
Planning, Engineering, and Design	685,000
Supervision and Administration	657,000
Total	$13,300,000

NON-FEDERAL COST: Based on the cost sharing concept adopted for the Caernarvon Structure, the non-Federal sponsor will voluntarily contribute 25 percent of the first cost of the project as well as the required 25 percent of the cost of operating, maintaining, repairing, rehabilitating, and replacing the project after completion.

Requirements of Local Cooperation

Contribute 25 percent of the costs allocated to fish and wildlife restoration and pay 25 percent of the costs of operation, maintenance, repair, rehabilitation, and replacement of fish and wildlife facilities.

	Payments During Construction and Reimbursements	Annual Operation, Maintenance, Repair, Rehabilitation, and Replacement Costs
Davis Pond	$20,100,000	$ 82,000
Bohemia	1,600,000	27,000
Homeplace	2,800,000	52,000
Caernarvon	6,500,000	69,000
Total Non-Federal Costs	$31,000,000	$230,000

The non-Federal sponsor for the Caernarvon and Davis Pond Structures has also agreed to make all required payments concurrently with project construction.

STATUS OF LOCAL COOPERATION: The Project Cooperation Agreement for the Caernarvon Structure was signed by the State of Louisiana on 2 June 1987 and by the Assistant Secretary of the Army for Civil Works on 10 June 1987. The current non-Federal cost estimate of $6,500,000, which includes a cash contribution of $5,533,000, is an increase of $375,000 from the non-Federal cost estimate of $6,125,000 noted in the Project Cooperation Agreement, which included a cash contribution of $6,125,000. In a letter dated 26 February 1987, the non-Federal sponsor indicated that it is financially capable and willing to contribute the increased non-Federal share. Our analysis of the non-Federal sponsor's financial capability to participate in the project affirms that the sponsor has a reasonable and implementable plan for meeting its financial commitment. The State of Louisiana has provided cash contributions of $5,432,000 through 30 September 1994 for the Caernarvon Structure. The State is also performing biological monitoring, with an estimated value of $967,000.

The Project Cooperation Agreement for the Davis Pond Structure was signed 17 April 1993, by the State of Louisiana and for the Acting Assistant Secretary of the Army. The State of Louisiana plans to fund both the construction, and the operations and maintenance of the project through the Wetlands Conservation and Restoration Trust Fund. Our recent analysis of the non-Federal sponsor's financial capability affirms that the sponsor has a reasonable and implementable plan for meeting its financial commitment. The State of Louisiana has provided cash contributions of $3,800,000 through 30 September 1994, for the Davis Pond Structure.

COMPARISON OF FEDERAL COST ESTIMATES: The current Federal cost estimate of $92,800,000 is an increase of $9,000,000 from the latest estimate ($83,800,000) submitted to Congress (FY 1995). This change includes the following items:

Item	Amount
Price Escalation on Construction Features	$ 224,000
Post Contract Award and Other Estimating Adjustments	8,226,000
Schedule Changes	550,000
Total	$ 9,000,000

STATUS OF ENVIRONMENTAL IMPACT STATEMENT: The final Environmental Impact Statement for the Louisiana Coastal Area Study was filed with the Environmental Protection Agency on 5 April 1985. This statement is adequate for the Caernarvon and Davis Pond structures.

OTHER INFORMATION: Local interests, during the period 1954-1970, spent an estimated $420,000 for construction and maintenance of freshwater diversion structures and channel improvements on the east bank of the Mississippi River in the vicinity of Bohemia and Bayou Lamoque.

Funds to initiate preconstruction engineering and design were appropriated in FY 1969 and funds to initiate construction were appropriated in FY 1987. The scheduled completion date of February 2003 for programmed work is a slippage of one year from the latest completion date (February 2002) presented to Congress. This change is due to delays in having to redesign the temporary railroad relocations as a result of new minimum speed requirements imposed by the railroad companies and from having to prepare additional environmental assessments because changes in the relocation method proposed by the utility companies require additional easements.

SUMMARIZED FINANCIAL DATA:

Davis Pond:		
Estimated Federal Cost		$60,300,000
Estimated Non-Federal Cost		20,100,000
Cash Contributions	$20,100,000	
Other Costs	0	
Total Estimated Project Cost		$80,400,000
Caernarvon:		
Estimated Federal Cost		$19,400,000
Estimated Non-Federal Cost		6,500,000
Cash Contributions	$ 5,533,000	
Other Costs	967,000	
Total Estimated Project Cost		$25,900,000

REMAINING BENEFIT - REMAINING COST RATIO:

Davis Pond: 3.9 to 1 at 8-7/8 percent.
Caernarvon: Not applicable because construction is substantially complete.

TOTAL BENEFIT - COST RATIO:

Davis Pond: 2.2 to 1 at 8-7/8 percent.
Caernarvon: 6.4 to 1 at 3-1/4 percent.

APPROPRIATION TITLE: Flood Control, Mississippi River and Tributaries, AR, IL, KY, LA, MS, MO, and TN - Construction

PROJECT: Mississippi and Louisiana Estuarine Areas, Mississippi and Louisiana (Continuing)

LOCATION: The project is located in St. Charles Parish, Louisiana about 33 miles upstream of the City of New Orleans, Louisiana, at the upstream end of the Bonnet Carre' spillway structure.

DESCRIPTION: The project plan consists of box culverts with associated inflow and outflow channels designed to divert water from the Mississippi River into Lake Pontchartrain. A sediment trap will be located 2,300 feet downstream from the diversion structure. All work is programmed.

AUTHORIZATION: Water Resources Development Act of 1988.

REMAINING BENEFIT-REMAINING COST RATIO: 1.7 to 1 at 8-7/8 percent.

TOTAL BENEFIT-COST RATIO: 1.2 to 1 at 8-7/8 percent.

INITIAL BENEFIT-COST RATIO: 1.2 to 1 at 8-5/8 percent.

BASIS OF BENEFIT-COST RATIO: Benefits are from the latest available evaluation approved in February 1991, at 1990 price levels.

SUMMARIZED FINANCIAL DATA			ACCUM. PCT. OF EST. FED. COST	STATUS (1 January 1995)	PERCENT COMPLETE	PHYSICAL COMPLETION SCHEDULE
Estimated Federal Cost		$57,200,000		Entire Project	0	Being Determined
Estimated Non-Federal Cost		21,400,000				
Cash Contribution	$19,000,000					
Other Costs[1]	2,400,000					
Total Estimated Project Cost		$78,600,000				
Allocations to 30 September 1994	5,783,000					
Conference Allowance for FY 1995	5,600,000					
Allocation for FY 1995		1,000,000 [2]				
Allocations through FY 1995		6,783,000	12			
Allocation Requested for FY 1996		1,500,000	14			
Programmed Balance to Complete after FY 1996		48,917,000				
Unprogrammed Balance to Complete after FY 1996		0				

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[1] Not creditable to the State's share of the project costs since utility relocations are the responsibility of the utility owners.

[2] Reflects $575,000 reduction assigned as savings and slippage and $4,025,000 reprogrammed from the project.

PHYSICAL DATA

Relocations:	
Roads and Bridges	U.S. Highway 61 bridge and LA Parish Road 12
Railroads	2 Railroad Bridges
Utilities	2 Power lines, 9 pipelines, 1 waterline, 4 fiber optic cables
Fish and Wildlife Facilities:	6 box culverts 18 feet by 18 feet 30,000 cubic feet per second
Channels:	6.0 miles with a depth of about 30 feet.
Levees:	0.4 miles

JUSTIFICATION: The productivity of fish and wildlife is being adversely affected by wetland loss. The natural processes of subsidence, compaction, erosion, and saltwater intrusion, which have been accelerated by channel dredging and levee building are major contributors to the land loss. The project area includes Lakes Maurepas, Pontchartrain, and Borgne, the Mississippi Sound and the adjacent wetlands that are influenced by these water bodies. The estuaries and wetlands, which are among the most productive in the nation in terms of fish and wildlife resources, make a significant contribution to the overall economies of Louisiana and Mississippi. Historically, a large portion of Louisiana's $500 million and Mississippi's $68 million commercial fish and wildlife harvests have been from the project area. The contribution that the project area makes to commercial fish and wildlife harvest has declined due to increased salinities and land loss. The project would reduce saltwater intrusion and significantly increase the production of oyster, white shrimp, blue crabs, croakers and menhaden.

About 10,500 acres of marsh and wooded swamps adjacent to Lakes Maurepas and Pontchartrain would be saved over the 50-year project life since the freshwater nutrients and sediments would result in a healthier marsh and reduce land loss. Oyster production is estimated to be increased by 5.7 million pounds annually in Louisiana and 1.9 million pounds annually in Mississippi. The average annual benefits, all commercial fish and wildlife enhancement, resulting from environmental restoration, are $9,123,000.

FISCAL YEAR 1996: The requested amount will be applied as follows:

Planning, Engineering and Design	$ 885,000
Supervision and Administration	615,000
Total	$ 1,500,000

NON-FEDERAL COST: Based on the cost sharing concept adopted for similar projects, the non-Federal sponsor will contribute 25 percent of the first cost of the project, as well as the required 25 percent of operating, maintaining, repairing, rehabilitating, and replacing the project after completion. The non-Federal costs will be shared between the states of Louisiana (20 percent) and Mississippi (5 percent), based on the estimated benefits to accrue to each state.

Requirements of Local Cooperation	Payments During Construction and Reimbursements	Annual Operation, Maintenance, Repair, Rehabilitation, and Replacement Costs
Pay 25 percent of the first costs allocated to fish and wildlife restoration, and pay 25 percent of the costs of operation, maintenance, repair, rehabilitation, and replacement of fish and wildlife facilities.	$19,000,000	$232,000
Total Non-Federal Costs	$19,000,000	$232,000

STATUS OF LOCAL COOPERATION: The basis of negotiations of the Project Cooperation Agreement with the local sponsors since November 1987 has been similar to terms of the one approved for the Mississippi Delta Region, Louisiana project's Caernarvon Freshwater Diversion structure, whereby the local sponsor voluntarily pays 25 percent of project first costs along with a mandatory 25 percent of operation and maintenance and rehabilitation of fish and wildlife facilities. The negotiated Project Cooperation Agreement, including Louisiana and Mississippi's letters of intent and their respective financing plans and statements of financial capability were submitted to higher authority on 21 June 1991. However, in a letter dated 13 July 1992, the Governor of Louisiana transferred the project responsibility from the Department of Natural Resources to the Department of Wildlife and Fisheries, requiring renegotiation of the Project Cooperation Agreement. The revised Project Cooperation Agreement was resubmitted to higher authority on 25 October 1993 and the Washington level review meeting was held in December 1993. The State of Louisiana intends to finance ten percent of the construction cost out of the state's Wetlands Conservation and Restoration Trust Fund. The remaining construction and operation and maintenance costs will be paid out of the State's capital outlay budget. The State of Mississippi will fund $4,000,000 of the project costs using the proceeds of a bond sale authorized in 1989 and 1993. The remaining operation and maintenance expenditures will be paid out of state appropriations. The Project Cooperation Agreement between the Federal Government and the States of Louisiana and Mississippi is scheduled to be executed in July 1995.

COMPARISON OF FEDERAL COST ESTIMATES: The current Federal cost estimate of $57,200,000 is a decrease of $500,000 from the latest estimate ($57,700,000) presented to Congress (FY 1995). This change includes the following item.

Item	Amount
Price Escalation on Construction Features	- $500,000
Total	- $500,000

STATUS OF ENVIRONMENTAL IMPACT STATEMENT: The final Environmental Impact Statement was filed with the Environmental Protection Agency on 27 April 1985.

OTHER INFORMATION: Funds to initiate preconstruction engineering and design were appropriated in FY 1985, and funds to initiate construction were appropriated in FY 1990.

APPROPRIATION TITLE: Flood Control, Mississippi River and Tributaries, AR, IL, KY, LA, MS, MO, and TN - Construction

PROJECT: Yazoo Basin, Mississippi (Continuing)

LOCATION: The project is located in Mississippi and extends generally from Memphis, Tennessee, southward to Vicksburg, Mississippi, and from the escarpment at Greenwood, westward to the Mississippi River.

DESCRIPTION: The project provides for protection against headwater floods of streams in the basin; against backwater floods of the Mississippi; and for major drainage in the delta area. The Yazoo Basin can be readily divided into three major flood control components (the Yazoo Headwater, the Yazoo Backwater, and the Big Sunflower River, Etc., Including Steele Bayou), the Streambank Erosion Control Evaluation and Demonstration Program, which has been completed, and the Demonstration Erosion Control Program. All of the work in the project is programmed except for remaining recreation facilities at Grenada Lake pending development of cost sharing agreements with local interests for construction and non-Federal operation and maintenance consistent with projects for which recreation facilities are being constructed under the provisions of the Federal Water Project Recreation Act of 1965 (Public Law 89-72), as amended; remaining work on Rocky Bayou pending a decision to continue construction in accordance with the cost sharing and financing concepts reflected in the Water Resources Development Act of 1986; and remaining work on the Yazoo Backwater Pumping Plant pending development of cost sharing agreements with local interests for construction and non-Federal operation and maintenance in accordance with the cost sharing and financing concepts reflected in the Water Resources Development Act of 1986.

AUTHORIZATION: Flood Control Acts of 1936, 1937, 1938, 1941, 1944, 1946, 1950, 1962, 1965, and the Water Resources Development Acts of 1974 and 1986.

REMAINING BENEFIT-REMAINING COST RATIO: 3.1 to 1 at 2-1/2 percent.

TOTAL BENEFIT-COST RATIO: 4.3 to 1 at 2-1/2 percent.

INITIAL BENEFIT-COST RATIO: 2.1 to 1 at 2-1/2 percent (FY 1967).

BASIS OF BENEFIT-COST RATIO: Benefits and costs for the Yazoo Backwater Pumping Plant are from the latest evaluation approved in July 1983 at 1974 price levels added since last year. Benefits for the remaining features of the Yazoo Basin project are based on "Upper Steele Bayou Project Reformulation Study", December 1992; and "Upper Yazoo Projects Reformulation Study", December 1993. Costs are based on October 1994 costs deflated to 1974 price levels.

SUMMARIZED FINANCIAL DATA

Estimated Federal Cost		$1,926,145,000
Programmed Construction	$ 1,776,364,000	
Unprogrammed Construction	149,781,000	
Estimated Non-Federal Cost		29,592,000
Programmed Construction	900,000	
Cash Contribution	816,000	
Other Costs	84,000	
Estimated Non-Federal Cost		
Unprogrammed Construction	28,692,000	
Cash Contribution	23,447,000	
Other Costs	5,245,000	
Total Estimated Programmed Construction Cost		1,777,264,000
Total Estimated Unprogrammed Construction Cost		178,473,000
Total Estimated Project Cost		1,955,737,000

STATUS (1 January 1995)	PERCENT COMPLETE	COMPLETION SCHEDULE
Yazoo City	100	--
Belzoni	100	--
Will M. Whittington Auxiliary Channel	99	[1]
Sardis Lake	100	--
Arkabutla Lake	100	--
Enid Lake	100	--
Grenada Lake	98	Indefinite
Greenwood	100	--
Streambank Erosion Control Evaluation and Demonstration	100	--
Upper Yazoo Projects	22	[1]
Main Stem	73	[1]
Tributaries	62	[1]
All Work Except Ascalmore-Tippo and Opossum Bayous	62	[1]
Ascalmore-Tippo and Opossum Bayous	71	[1]
Demonstration Erosion Control	21	[1]
Big Sunflower River, Etc., Including Steele Bayou	62	[1]

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[1] Being Determined

SUMMARIZED FINANCIAL DATA		ACCUM. PCT. OF EST. FED. COST
Allocations to 30 September 1994	$ 718,606,000	
Conference Allowance for FY 1995	58,295,000	
Allocation for FY 1995	54,078,000 [2]	
Allocations through FY 1995	772,684,000	40
Allocation Requested for FY 1996	47,928,000	43
Programmed Balance to Complete after FY 1996	955,752,000	
Unprogrammed Balance to Complete after FY 1996	149,781,000	

STATUS (1 January 1995)	PERCENT COMPLETE	COMPLETION SCHEDULE
Yazoo Backwater	23	[1]
Yazoo Backwater Including Muddy Bayou Control Structure	51	[1]
Rocky Bayou Separable Element	27	Indefinite
Backwater Pumping Plant Separable Element	5	Indefinite
Yazoo Backwater Mitigation Separable Element	66	[1]
Reformulation Study	82	[1]
Entire Project	65	[1] [3]

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[1] Being determined.

[2] Reflects $5,924,000 reduction for savings and slippage and $1,707,000 reprogrammed to the project.

[3] For programmed work only; remaining work is unprogrammed pending a decision to construct these features.

PHYSICAL DATA

Yazoo City:
Lands and Damages: 361 acres
Relocations: 1.1 miles roads
Levees: 4.1 miles
Channels: 1.6 miles
Pumping Plant: 1 - 540 cubic feet per second

Belzoni:
Lands and Damages: 3.3 acres
Levees: 0.6-mile levee and 0.5-mile floodwall

Sardis Lake:
Lands and Damages: 98,584 acres
Relocations:
Roads: 3.2 miles and 1 bridge
Railroads: 3.2 miles and 1 bridge
Reservoir: 58,500-acre pool area
Dam: Earthfill, 15,300 feet long; 97 feet average height
Roads, Railroads, and Bridges: 7.6 miles roads and 8 bridges
Recreation Facilities: 19 sites
Buildings: 4

Arkabutla Lake:
Lands and Damages: 52,629 acres
Relocations:
Roads: 5.5 miles and 5 bridges
Railroads: 5.8 miles and 2 bridges
Reservoir: 33,400-acre pool area
Dam: Earthfill, 11,500 feet long; 67 feet average height
Roads: 4 miles
Channel and Canals: 1.5 miles
Recreation Facilities: 11 sites
Buildings: 4

Will M. Whittington Auxiliary Channel:
Lands and Damages: 11,996 acres
Relocations:
Roads: 3.0 miles and 12 bridges
Railroads: 0.4 mile and 1 bridge
Fish and Wildlife Facilities:
1 water control structure
Channels: 30.8 miles
Levees: 61.3 miles

Enid Lake:
Lands and Damages: 43,870 acres
Relocations:
Roads: 19.1 miles and 9 bridges
Reservoir: 28,000-acre pool area
Dam: Earthfill, 8,400 feet long; 85 feet average height
Roads: 1 mile
Recreation Facilities: 10 sites
Buildings: 4

Grenada Lake:
Lands and Damages: 90,356 acres
Relocations:
Roads: 83.2 miles and 47 bridges
Railroads: 21.6 miles and 21 bridges
Cemetery: 1
Reservoir: 64,600-acre pool area
Dam: Earthfill, 13,900 feet long; 80 feet average height
Roads: 4.5 miles and 1 bridge
Recreation Facilities: 20 sites
Buildings: 4

Greenwood:
- Lands and Damages: 1,435 acres
- Relocations:
  - Roads: 0.5 mile and 4 bridges
- Bank Stabilization: 0.8 mile
- Channels: Big Sand Creek Diversion (2.9 miles)
- Levees and Floodwalls: 28.4 miles, height 4-6 feet
- Pumping Plants: Storm Water: 3-capacity 67, 89, and 675 cubic feet per second

Upper Yazoo Projects:
- Lands and Damages: 24,171 acres
- Relocations:
  - Roads: 8.0 miles and 1 bridge
- Utilities:
  - 16 pipelines
  - 20 power lines
  - 9 telephone lines
- Channels: 2 cutoffs, 197.4 miles; bottom width of 75 feet to 150 feet
- Levees: 26.6 miles levees and 0.2-mile floodwall, average height 3.5 feet
- Flood Control and Diversion Structure: One control structure with three 32-foot-wide gate bays, 66 water control structures, and 2 sedimentation structures
- Bank Stabilization: 6.8 miles

Main Stem:
- Lands and Damages: 16,560 acres
- Relocations:
  - Roads: 28.9 miles and 10 bridges
  - Railroads: 1.2 miles
- Channels: 43 cutoffs, 251 miles channel clearing and 21 miles channel enlargement (total miles 288.3)
- Levees: 156.1 miles; variable height, 3 to 28 feet
- Bank Stabilization: 1.8 miles

Tributaries:
- All Work Except Ascalmore-Tippo and Opossum Bayous
  - Lands and Damages: 40,177 acres
  - Relocations:
    - Roads: 7.3 miles and 57 bridges
    - Railroads: 2.2 miles and 6 bridges
  - Channels: 442.6 miles
  - Levees: 147.8 miles, variable height, 3 to 25 feet
  - Pumping Plant: 1 storm water (McKinney Bayou) 250 cubic feet per second; 3 Pelucia Creek Pumping Plants, 75, 15, and 10 cubic feet per second
  - Bank Stabilization: 8.2 miles
    - 9 Grade Control Structures

Ascalmore-Tippo and Opossum Bayous:
- Lands and Damages: 2,601 acres
- Relocations:
  - Roads: 11 bridges
  - Railroads: 1 bridge
- Channels: 50.6 miles
- Levees: 12.6 miles; average height 7 feet

Demonstration Erosion Control:	
Abiaca Creek Watershed:	
Bank Stabilization	6.2 miles
Floodwater Retarding Structures	3
Levees	12.0 miles
Major Grade Control Structures	6
Minor Grade Control Structures	50
Batupan Bogue Watershed:	
Bank Stabilization	18.5 miles
Levees and Floodwalls	7.0 miles
Major Grade Control Structures	37
Minor Grade Control Structures	62
Black Creek Watershed:	
Bank Stabilization	26.8 miles
Levees	1.5 miles
Floodwater Retarding Structures	12
Major Grade Control Structures	14
Minor Grade Control Structures	136
Burney Branch Watershed:	
Bank Stabilization	1.0 mile
Cane-Mussacuna Watershed:	
Bank Stabilization	2.1 miles
Channel Cleanout	3.0 miles
Major Grade Control Structures	7
Minor Grade Control Structures	55
Coldwater River Watershed:	
Bank Stabilization	34.0 miles
Floodwater Retarding Structures	6
Major Grade Control Structures	67
Minor Grade Control Structures	235
Channel Cleanout	3.0 miles
Hickahala-Senatobia Watershed:	
Bank Stabilization	5.2 miles
Channel Cleanout	13.9 miles
Major Grade Control Structures	33
Minor Grade Control Structures	95

Demonstration Erosion Control: (Cont)	
Hotophia Creek Watershed:	
Bank Stabilization	0.8 mile
Minor Grade Control Structures	25
Hurricane-Wolf Watershed:	
Bank Stabilization	5.2 miles
Major Grade Control Structures	8
Minor Grade Control Structures	90
Long Creek Watershed:	
Bank Stabilization	6.0 miles
Major Grade Control Structures	13
Otoucalofa Creek Watershed:	
Bank Stabilization	4.2 miles
Channel Cleanout	7.7 miles
Major Grade Control Structures	5
Minor Grade Control Structures	70
Pelucia Creek Watershed:	
Bank Stabilization	1.0 mile
Major Grade Control Structures	4
Minor Grade Control Structures	65

Big Sunflower River, Etc., Including Steele Bayou:
  Lands and Damages: 34,974 acres
  Relocations:
    Roads: 2.0 miles and 68 bridges
    Railroads: 1 bridge
    Fish and Wildlife Facilities: 9 water control structures

Big Sunflower River, Etc., Including Steele Bayou: (Cont)

Channels: (miles)

Big Sunflower River	216
Quiver River	81
Steele Bayou	100
Deer Creek	7
Bogue Phalia	95
Little Sunflower River	28
Hushpuckena River	28
Tributaries	172
Gin and Muddy Bayous	12.3
Total	739.3

1 channel weir

Levees: 9.0 miles, average height 7 feet; 4 gated culverts and 4 fixed crest spillways

Bank Stabilization: 1.0 mile

Yazoo Backwater Including Muddy Bayou Control Structure:

Lands and Damages: 30,203 acres

Relocations:

Roads:	24.3 miles and 2 bridges
Railroads:	0.8 mile and 1 bridge

Fish and Wildlife Facilities:
- 2 Water Control Structures
- 7 Greentree Reservoirs
- 5 Slough Control Areas
- 4 Pumping Stations

Channels: 38.9 miles, average depth, 25 feet

Levees: 78.5 miles levees, variable height, 5 to 30 feet; 5 floodgates, openings vary in size from 72 square feet to 2,700 square feet

Yazoo Backwater Including Muddy Bayou Control Structure: (Cont)

Recreation Facilities: 2 boat-launching ramps

Floodway Control and Diversion Structures:
Muddy Bayou Control Structure (opening size 480 square feet)

Rocky Bayou Area:

Lands and Damages: 1,140 acres

Relocations:
Roads: 7.0 miles

Levees: 19.0 miles

Yazoo Backwater Pumping Plant:

Lands and Damages: 378 acres project lands

Relocations:
Roads: 1.0 mile and 1 bridge

Channels: 1.9 miles

Levees: 0.5 miles, variable height 7 to 30 feet

Pumping Plant: One 10,000 cubic feet per second

Yazoo Backwater, Fish and Wildlife Mitigation:

Lands and Damages: 8,807 acres

Streambank Erosion Control Evaluation and Demonstration:

Bank Stabilization: 65.0 miles

JUSTIFICATION: The Yazoo Headwater feature will protect 1,209,000 acres against overflow, substantially benefit 303,000 acres and protect Greenwood, Belzoni, Yazoo City and numerous smaller communities. Channel improvement work on the Big Sunflower River and its tributaries will protect 195,000 acres against the design flood and an additional 395,000 acres will be benefitted because of improved drainage conditions. Also, approximately 368,000 acres in the Yazoo Backwater Area will be protected against all but the larger floods and substantial benefits will accrue to an additional 224,000 acres from improved drainage. Had there been no protection in 1958, the floods of April-June and September would have caused damages amounting to $22,821,000. Should these floods recur under present conditions, but with the flood control works assumed complete, damages amounting to $181,779,000 would be prevented. In addition, the four Yazoo Basin lakes are being used extensively for recreation. A continual expansion of facilities is required to meet public demand for recreation opportunities. Visitor-day attendance increased from 2,857,000 in calendar year 1958 to 13,008,000 visitor days in FY 1994. Average annual benefits are as follows:

Annual Benefits	Amount
Flood Control	$113,973,000
Fish and Wildlife	7,142,000
Recreation	18,557,000
Area Redevelopment	1,234,000
Bank Stabilization Works	1,478,000
Total	$142,384,000

In recent years, considerable opposition developed to the Upper Yazoo Basin projects based on environmental concerns and concerns of landowners regarding land takings. To respond to these concerns and because the project plans were developed in the 1960's, a decision was made in December 1988 to reanalyze the remaining unconstructed portions of the project in accordance with the current Principles and Guidelines for planning water resources. This is necessary to determine the current advisability of the remaining work with respect to environmental effects and economic justification. Concurrently, former Governor Ray Mabus formed an Advisory Committee to advise him on how the controversial issues might be resolved. As a result of these two actions, the Corps has undertaken a reformulation study of the remaining unconstructed features of the Yazoo Basin project. This study will identify alternative plans for achieving greater levels of environmental and urban flood protection. Funds were provided in FY 1991 to continue the study. The purpose of the study is to reformulate the project in accordance with the Principles and Guidelines. The study assumes all features scheduled to be placed under contract in FY 1990 were in place. The study will be completed in phases, and interim reports were prepared beginning in FY 1992 so that construction of the project could proceed as expeditiously as possible.

FISCAL YEAR 1996: The requested amount will be applied as follows:

Upper Yazoo Projects:	
Initiate:	
Miscellaneous Relocations	$ 11,000
Mitigation Phase II Structure	3,000
Continue:	
Lands and Damages	2,318,000
Item 4 Site Investigation	222,000
Item 3A-2 Channel	538,000
Alligator-Catfish Structure	283,000
Planning, Engineering, and Design	5,756,000
Supervision and Administration	2,069,000
Subtotal	$11,200,000
Main Stem:	
Planning, Engineering, and Design	$ 25,000
Subtotal	$ 25,000
Tributaries:	
Initiate:	
Levee Gap Closure	$ 196,000
Item 4 Railroad Bridge	880,000
Continue:	
Lands and Damages	108,000
Complete:	
Item 4 Highway 49 Bridge	1,404,000
Miscellaneous Hired Labor	45,000
Planning, Engineering, and Design	235,000
Supervision and Administration	80,000
Subtotal	$2,948,000

Demonstration Erosion Control:	
Initiate:	
Abiaca Creek Watershed:	
Item #2	$ 519,000
Batupan Bogue Watershed:	
Grenada Item #1	1,000,000
Black Creek Watershed:	
Floodwater-Retarding Structure #51	826,000
Initiate and Complete:	
Otoucalofa Creek Watershed:	
Water Valley 2 and 3	290,000
Continue:	
Lands and Damages	$ 1,500,000
Relocations	330,000
Cultural Resource Preservation	300,000
Collection and Study Basic Data	2,163,000
Abiaca Creek Watershed:	
Abiaca Creek Item #1	449,000
Black Creek Watershed:	
Floodwater Retarding Structure #52	708,000
Coldwater River Watershed:	
2 Low Drop Grade Control Structures	377,000
Hickahala Creek Watershed:	
Channel Restoration Item #2	399,000
Channel Restoration Item #3	2,413,000
Complete:	
Abiaca Creek Watershed:	
3 Low Drop Grade Control Structures	$ 45,000
Batupan Bogue Watershed:	
1 Low Drop Grade Control Structure	10,000
1 High Drop, Grade Control Structure, Mouse Creek	25,000
Black Creek Watershed:	
10 Riser Pipe Grade Control Structures	10,000
Floodwater Retarding Structure #47	333,000

Cane-Mussacuna Watershed:	
10 Riser Pipe Grade Control Structures	5,000
Coldwater River Watershed:	
87 Riser Pipe Grade Control Structures	518,000
Beartail #1, #2, and #3	72,000
3 Box Culverts	38,000
Hickahala Creek Watershed:	
T. Jones 1/Basket 1	19,000
Otoucalofa Creek Watershed:	
Floodwater Retarding Structure #8 and #12	404,000
Miscellaneous Hired Labor	$ 235,000
Planning, Engineering, and Design	7,334,000
Supervision and Administration	1,580,000
Hazardous and Toxic Waste	98,000
Subtotal	$22,000,000
Big Sunflower, Etc., Including Steele Bayou:	
Initiate:	
Item 66A/66B Phase III	$ 570,000
Black Bayou:	
Miscellaneous Relocations	344,000
Black Bayou Item 3	934,000
Robertshaw Ditch:	
Miscellaneous Relocations	104,000
Robertshaw Ditch	100,000
Mitigation:	
Wood Duck Boxes	96,000
Reforestation Phase I	100,000

Continue:	
Lands and Damages	551,000
Black Bayou:	
Miscellaneous Relocations	457,000
Black Bayou Item 2	1,720,000
Main Canal:	
Miscellaneous Relocations	$ 931,000
Main Canal Item 1	405,000
Main Canal Item 2	1,518,000
Mitigation Reforestation Items 66A and 66B	64,000
Complete:	
Main Canal:	
Waterline Item 1	1,000
Planning, Engineering, and Design	459,000
Supervision and Administration	566,000
Subtotal	$8,920,000
Reformulation Study:	
Reformulation Studies	$2,810,000
Subtotal	$2,810,000
Yazoo Backwater Fish and Wildlife Mitigation Lands	
Continue:	
Reforestation	25,000
Subtotal	25,000
TOTAL	$47,928,000

NON-FEDERAL COST: In accordance with the cost-sharing and financing concepts reflected in the initial authorization and subsequent authorized modifications of the Yazoo Basin project including the Water Resources Development Act of 1986, the non-Federal sponsor must comply with the requirements listed below.

Requirements of Local Cooperation	Payments During Construction and Reimbursements	Annual Operation, Maintenance, Repair, Rehabilitation, and Replacement Costs
Will M. Whittington:		
Pay 25 percent of the first costs allocated to fish and wildlife enhancement and pay 25 percent of the costs of operation, maintenance, repair, rehabilitation, and replacement of fish and wildlife facilities	$ 213,000	$61,000
Subtotal Non-Federal Costs	$ 213,000	$61,000
Big Sunflower River, Etc., Including Steele Bayou:		
Provide 25 percent of lands allocated to fish and wildlife enhancement.	$ 43,000	
Pay 25 percent of the first costs allocated to fish and wildlife enhancement and pay 25 percent of the costs of operation, maintenance, and maintain and operate fish and wildlife facilities and perform minor maintenance on the project.	$ 453,000	$40,000
Provide lands, easements, rights-of-way, and borrow and excavated or dredged material disposal areas	$ 30,000	
Subtotal Non-Federal Costs	$ 526,000	$40,000

Requirements of Local Cooperation	Payments During Construction and Reimbursements	Annual Operation, Maintenance, Repair, Rehabilitation, and Replacement Costs
Main Stem: Provide lands, easements, rights-of-way, and dredged material disposal areas	$ 11,000	
Subtotal Non-Federal Costs	$ 11,000	
Yazoo Backwater Including Muddy Bayou Control Structures: Pay 25 percent of the first costs allocated to fish and wildlife enhancement and pay 25 percent of the costs of operation, maintenance, repair, rehabilitation, and replacement of fish and wildlife facilities	$ 150,000	$24,000
Subtotal Non-Federal Costs $24,000	$ 150,000	
Rocky Bayou: Provide lands, easements, rights-of-way, and dredged material disposal areas	$1,268,000	
Modify or relocate utilities, roads, bridges (except railroad bridges), and other facilities, where necessary for the construction of the project	$1,471,000	

Requirements of Local Cooperation	Payments During Construction and Reimbursements	Annual Operation, Maintenance, Repair, Rehabilitation, and Replacement Costs
Rocky Bayou:		
Pay 8.2 percent of the costs allocated to flood control to bring the total non-Federal share of flood control costs to 25 percent, and bear all costs of operation, maintenance, repair, rehabilitation, and replacement of flood control facilities.	$1,345,000	$32,000
Subtotal Non-Federal Costs	$4,084,000	$32,000
Yazoo Backwater Pumping Plant:		
Modify or relocate utilities, roads, bridges (except railroad bridges), and other facilities, where necessary for the construction of the project	$ 2,506,000	
Pay 22.5 percent of the costs allocated to flood control to bring the total non-Federal share of flood control costs to 25 percent, and bear all costs of operation, maintenance, repair, rehabilitation, and replacement of flood control facilities.	$22,102,000	$797,160
Subtotal Non-Federal Costs	$24,608,000	$797,160
Total Non-Federal Costs	$29,592,000	$797,317

STATUS OF LOCAL COOPERATION:

Flood Control:

Local cooperation is not required for the Yazoo Headwater Unit.

Assurances to operate the Big Sunflower River Unit and perform minor maintenance have been accepted from the Yazoo-Mississippi Delta Levee District and the Board of Mississippi Levee Commissioners. Formal assurances for work in the Steele Bayou Basin were accepted 8 June 1972 without the requirement that local interests "construct or have constructed by others, the necessary associated interior drainage works." The requirements of PL 91-646 are a Federal responsibility.

For the Yazoo Backwater unit, assurances of local cooperation have been accepted from the Board of Mississippi Levee Commissioners and the Yazoo-Mississippi Delta Levee District. Supplemental assurances covering the requirements of local cooperation as provided for in the "Uniform Relocation Assistance and Real Property Acquisition Policies Act of 1970" (PL 91-646), were accepted 7 August 1972. The Board of Levee Commissioners for the Yazoo-Mississippi Delta, non-Federal sponsor for the Rocky Bayou, and the Board of Levee Commissioners for the Mississippi Levee District, non-Federal sponsor for the Backwater Pumping Plant, have been notified of the cost-sharing requirements of the Water Resources Development Act of 1986. The Board of Commissioners for the Mississippi Levee District indicated by letter dated 3 November 1988 they cannot agree to any form of cost sharing for the Yazoo Backwater Pumping Plant. However, they have recently agreed to pay up to 5 percent toward the remaining construction cost and operating cost as per 16 July 1990 letter from Senator Thad Cochran to Senator J. Bennett Johnston, Chairman, Subcommittee on Energy and Water Development. The Board of Levee Commissioners for the Yazoo-Mississippi Delta has not responded concerning their intentions to cost share. As a result, no schedule has been developed for execution of the Local Cooperation Agreements.

Recreation:

The State of Mississippi, which provided formal assurances in 1967 that it would operate and maintain Corps constructed recreation facilities at the Yazoo Basin lakes, notified the Vicksburg District in the early 1980's that it was unable to fully comply with the assurances and to continue the operation and maintenance function for some of the sites. Under the terms of an escape clause in the leases, the state was allowed to withdraw their operation and maintenance support at some sites.

Fish and Wildlife:

Local cooperation agreements will be obtained when planning is more advanced.

COMPARISON OF FEDERAL COST ESTIMATES: The current cost estimate of $1,926,145,000 is a decrease of $41,749,000 from the latest estimate ($1,967,894,000) presented to Congress (FY 1995). This change includes the following items:

Item	Amount
Price Escalation on Construction Features	-$46,051,000
Price Escalation on Real Estate Features	4,932,000
Post Contract Award and Other Estimating Adjustments	-630,000
Total	-$41,749,000

STATUS OF ENVIRONMENTAL IMPACT STATEMENT: Final Environmental Impact Statements have been filed with the Council on Environmental Quality or with the Environmental Protection Agency as follows:

Project Unit	Date
Upper Yazoo Project	16 January 1976
Main Stem	16 January 1976
Tributaries (Except Ascalmore-Tippo and Opossum Bayou)	16 January 1976
Ascalmore-Tippo and Opossum Bayou	6 June 1975
Demonstration Erosion Control	[1]
Big Sunflower	16 January 1976
Yazoo Backwater	16 January 1976

OTHER INFORMATION:

Funds to initiate construction were appropriated in FY 1936.

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[1] The appropriate National Environmental Policy Act documentation will include preparation of an Environmental Impact Statement if environmental impacts are determined to be significant.

APPROPRIATION TITLE: Flood Control, Mississippi River and Tributaries, AR, IL, KY, LA, MS, MO and TN - Construction

PROJECT: Horn Lake Creek and Tributaries, Including Cow Pen Creek, Tennessee and Mississippi - (Continuing)

LOCATION: The Horn Lake Creek Basin is located in extreme northwest Mississippi, in DeSoto County, and southwest Shelby County, Tennessee, just south of Memphis, Tennessee.

DESCRIPTION: The plan of improvement of programmed work consists of 3.5 miles of drift removal and 2.75 miles of vegetative clearing on Horn Lake Creek, 2.1 miles of vegetative clearing on Rocky Creek, and 0.62 miles of vegetative clearing, and 1.85 miles of channel enlargement on Cow Pen Creek. Channel enlargement on Cow Pen Creek consists of a bottom width of 35 feet and a side slope of 1 foot vertical on 2.5 feet horizontal. The plan of improvement of unprogrammed work consists of recreation features which include hiking and biking trails adjacent to Rocky and Cow Pen Creek.

AUTHORIZATION: Water Resources Development Act of 1986.

REMAINING BENEFIT-REMAINING COST RATIO: 2.0 to 1 at 8-3/4 percent.

TOTAL BENEFIT-COST RATIO: 3.6 to 1 at 8-3/4 percent.

INITIAL BENEFIT-COST RATIO: 3.2 to 1 at 8-7/8 percent (FY 1991).

BASIS OF BENEFIT-COST RATIO: Benefits are from the latest available evaluation approved in December 1990 at 1988 price levels.

SUMMARIZED FINANCIAL DATA			
Estimated Federal Cost			$2,400,000
Programmed Construction		2,382,000	
Unprogrammed Construction		18,000	
Estimated Non-Federal Cost			2,400,000
Programmed Construction		2,382,000	
Cash Contributions	240,000		
Other Costs	2,142,000		
Estimated Non-Federal Cost			
Unprogrammed Construction		18,000	
Cash Contributions	0		
Other Cost	18,000		

STATUS (1 Jan 1995)	PERCENT COMPLETE	PHYSICAL COMPLETION SCHEDULE
Channels	50	Dec 1995
Recreation	0	Indefinite
Entire Project	50	Dec 1995 [1]

PHYSICAL DATA

Lands and Damages	105.0 acres
Relocations	
Roads	4 bridges
Utilities	11 facilities
Channels	11 miles
Recreation	
Hiking/Biking Trails	4.6 miles

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[1] For programmed work only; remaining work is unprogrammed pending a decision to construct these features.

		ACCUM. PCT. OF EST. FED. COST
Total Estimated Programmed Construction	4,764,000	
Total Estimated Unprogrammed Construction	36,000	
Total Estimated Project Cost	4,800,000	
Allocations to 30 September 1994	1,947,000	
Conference Allowance for FY 1995	310,000	
Allocation for FY 1995	286,000 [2]	
Allocations through FY 1995	2,233,000	93
Allocation Requested for FY 1996	148,000	99
Programmed Balance to Complete After FY 1996	0	
Unprogrammed Balance to Complete After FY 1996	18,000	

JUSTIFICATION: The project will reduce flooding to urban areas in Horn Lake and Southaven, Mississippi, as well as agricultural land along Cow Pen Creek and Horn Lake Creek. The project will also provide a 25-year level of protection to existing residential developments along Cow Pen Creek, and 1.1-year level of protection to existing developments along Horn Lake Creek and along Rocky Creek.

Flooding impacts residential structures and streets and roads with a present value of $11,433,000 (1994 price levels). Average annual damages for such properties with and without project conditions are $211,000 and $1,012,000, respectively,(1994 price levels). Major flooding has occurred in 1973, 1975, 1987 and 1988. Some flooding has occurred on an annual basis over recent years as the Horn Lake Basin has rapidly developed within the existing flood plain. In addition to damages to crops and property, disruption of vehicular traffic and the threat of injury or loss of life during flood occurrences continues to have a detrimental effect on the quality of life in the basin. Average annual benefits are as follows:

Annual Benefits	Amount
Flood Control	867,000
Recreation	262,000
Total	1,129,000

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[2] Reflects $32,000 reduction assigned as savings and slippage and $8,000 reprogrammed to the project.

FISCAL YEAR 1996: The requested amount will be applied as follows:

Complete:	
Lands and Damages	$ 8,000
Cow Pen Creek - Mi. 0.0 - 2.47	$ 95,000
Supervision & Administration	$ 45,000
Total	$148,000

NON-FEDERAL COST: In accordance with the cost sharing concepts reflected in the Water Resources Development Act of 1986, the non-Federal sponsor must comply with the requirements listed below.

Requirements of Local Cooperation	Payments During Construction and Reimbursements	Annual Operation, Maintenance, Repair, Rehabilitation, and Replacement Costs
Provide lands, easements, rights-of-way, and dredged material disposal areas which includes credit of $240,000 allowed for Section 104 of the Water Resources Development Act of 1986	2,039,000	
Modify or relocate utilities, roads, bridges (except railroad bridges), and other facilities, where necessary for the construction of the project.	103,000	
Pay one-half of the separable costs allocated to recreation and bear all costs of operation, maintenance, repair, rehabilitation and replacement of recreation facilities.	18,000	300
Pay 5 percent of the costs allocated to flood control and bear all costs of operation, maintenance, repair, rehabilitation and replacement of flood control facilities.	240,000	17,700
Total Non-Federal Costs	$ 2,400,000	$ 18,000

STATUS OF LOCAL COOPERATION: Local interests in DeSoto County, the cities of Southaven, and Horn Lake, Mississippi have formed the Horn Lake Creek Watershed Drainage District to act as an umbrella project sponsor with attendant legal and financial capability. The

Local Cooperation Agreement for flood control features was executed on 26 February 1992. Recreational facilities may be pursued under a separate Project Cooperation Agreement. Presently, recreational work is unprogrammed.

In accordance with Section 104 of the Water Resources Development Act of 1986, non-Federal interests received $240,000 on 5 May 1992 for credit against their share of project costs for work accomplished prior to project authorization and determined to be compatible by the Assistant Secretary of the Army for Civil Works.

COMPARISON OF FEDERAL COST ESTIMATES: The current Federal cost estimate of $2,400,000 is an increase of $50,000 over the latest estimate ($2,350,000) presented to Congress (FY 1995). This change includes the following items:

Item	Amount
Price Escalation on Construction Features	$50,000
Total	$50,000

STATUS OF ENVIRONMENTAL IMPACT STATEMENT: The final Environmental Impact Statement was filed with the Environmental Protection Agency on 22 July 1982. An Environmental Impact Assessment was completed with a finding of no significant impact during preparation of the December 1988 General Design Memorandum. The assessment concluded that environmental impacts of the reevaluated project would not vary significantly from those already described in the 1982 Environmental Impact Statement.

OTHER INFORMATION: Funds to initiate preconstruction engineering and design were appropriated in FY 1987 and funds to initiate construction were appropriated in FY 1991.

APPROPRIATION TITLE: Flood Control, Mississippi River and Tributaries, AR, IL, KY, LA, MS, MO and TN - Construction

PROJECT: Nonconnah Creek, Tennessee and Mississippi (Continuing)

LOCATION: The Nonconnah Creek Basin is located in portions of Shelby and Fayette Counties in southwest Tennessee and extends into DeSoto and Marshall Counties in northwest Mississippi. Approximately half of the city of Memphis, Tennessee, is located within the drainage area.

DESCRIPTION: The plan provides for 7.7 miles of channel enlargement, 10.5 miles of channel clearing, 8.8 miles of bike/hike trails, 0.8 miles of nature trail, and a 33-acre nature area. Channel enlargement and channel clearing are programmed for construction. The recreation and fish and wildlife enhancement features are not programmed for construction.

AUTHORIZATION: Water Resources Development Act of 1986.

REMAINING BENEFIT-REMAINING COST RATIO: 4.9 to 1 at 8-7/8 percent.

TOTAL BENEFIT-COST RATIO: 1.4 to 1 at 8-7/8 percent.

INITIAL BENEFIT-COST RATIO: 1.8 to 1 at 8-5/8 percent (FY 1990).

BASIS OF BENEFIT-COST RATIO: Benefits are from the latest available evaluation approved in June 1990 at October 1987 price levels.

SUMMARIZED FINANCIAL DATA			
Estimated Federal Cost			$ 18,400,000
Programmed Construction		$17,824,000	
Unprogrammed Construction		576,000	
Estimated Non-Federal Cost			6,600,000
Programmed Construction		6,207,000	
Cash Contributions	$ 1,200,000		
Other Costs	5,007,000		

STATUS (1 January 1995)	PERCENT COMPLETE	PHYSICAL COMPLETION SCHEDULE
Channels	50	Sep 1997
Recreation and Fish and Wildlife	0	Indefinite
Entire Project	50	Sep 1997[1]

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[1] For programmed work only; remaining work is unprogrammed pending a decision to construct these features.

				ACCUM. PCT. OF EST. FED COST
Estimated Non-Federal Cost				
Unprogrammed Construction		393,000		
Cash Contributions	0			
Other Costs	393,000			
Total Estimated Programmed Construction			24,031,000	
Total Unprogrammed Construction Cost			969,000	
Total Estimated Project Cost			25,000,000	
Allocations to 30 September 1994			9,152,000	
Conference Allowance for FY 1995			100,000	
Allocation for FY 1995			90,000[2]	
Allocations through FY 1995			9,242,000	50
Allocation Requested for FY 1996			1,600,000	59
Programmed Balance to Complete After FY 1996			6,982,000	
Unprogrammed Balance to Complete After FY 1996			576,000	

PHYSICAL DATA

Lands and Damages:	
Flood Control	600 acres
F&WL Enhancement	33 acres
Relocations:	
Roads	1 bridge
Utilities	36 facilities
Channels:	
Enlargement	7.7 miles
Vegetative Clearing	10.5 miles
Recreation:	
Bike/Hike Trails	8.8 miles
Nature Trail	0.8 miles

JUSTIFICATION: Flood protection is needed for 7,400 homes, businesses, and public buildings on 12,000 acres of urban and urbanizing lands located within the Nonconnah Creek flood plain inundated by the standard project flood. The present value of these properties subject to flood damage is equal to $1,558,300, (1994 price levels). With the proposed Soil Conservation Service structures on Johns Creek assumed in place, over 7,300 structures (6,200 residential and 1,100 commercial and industrial structures) and 9,700 overbank acres along the urban area of Nonconnah Creek would be subjected to flooding from the standard project flood. No change in land use within the floodplain is projected due to construction of the flood control project, nor will any permanent deposition of material be placed in wetlands. Major floods occurred in the basin on 21 November 1934, when 10.48 inches of rain fell in 24 hours, and on 9 May 1958, when 4.76 inches of rain fell in approximately eight hours. The most recent significant flood occurred on 3 December 1978, when 4.9 inches were recorded at the Memphis International Airport. The 1978 storm appears to be between the 5-year and 10-year frequency events. Under present day conditions, the 1934 and 1958 flood levels would cause considerably higher damages due to increased urbanization. When completed, the Nonconnah Creek project will prevent approximately $357,000,000 in flood damages during the standard project flood. Total average annual benefits are as follows:

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[2] Reflects $10,000 reduction assigned as savings and slippage.

Annual Benefits	Amount
Flood Damage Prevention (Urban)	$ 2,377,000
Other Flood Control Benefits	537,000
Recreation	498,000
Fish and Wildlife Enhancement	33,000
Total	$ 3,445,000

FISCAL YEAR 1996: The requested amount will be applied as follows:

Initiate Item 1, Mile 0-6.2	$1,545,000
Supervision and Administration	55,000
Total	$1,600,000

NON-FEDERAL COST: In accordance with the cost sharing and financial concepts reflected in the Water Resources Development Act of 1986, the non-Federal sponsor must comply with the requirements listed below:

Requirements of Local Cooperation	Payments During Construction and Reimbursements	Annual Operation, Maintenance, Repair, Rehabilitation, and Replacement Costs
Provide lands, easements, rights-of-way, and dredged material disposal areas.	$ 1,828,000	
Modify or relocate buildings, utilities, roads, bridges (except railroad bridges) and other facilities where necessary in the construction of the project.	3,179,000	

Requirements of Local Cooperation	Payments During Construction and Reimbursements	Annual Operation, Maintenance, Repair, Rehabilitation, and Replacement Costs
Pay one-half of the separable costs allocated to recreation and bear all costs of operation, maintenance, repair, rehabilitation, and replacement of recreation facilities.	284,000	$ 14,000
Pay not less than 5 percent of the cost allocated to flood control to bring the total non-Federal share of flood control costs to 25 percent; and bear all costs of operation, maintenance, repair, rehabilitation, and replacement of flood control facilities.	1,200,000	12,000
Pay 25 percent of the first costs allocated to fish and wildlife enhancement, and pay 25 percent of the costs of operation, maintenance, repair, rehabilitation, and replacement of fish and wildlife facilities.	109,000	
Total Non-Federal Costs	$ 6,600,000	$ 26,000

The Non-Federal sponsor has also agreed to make all required payments concurrently with project construction.

STATUS OF LOCAL COOPERATION: The Local Cooperation Agreement for flood control features was executed on 23 July 1990, with the City of Memphis, Tennessee, serving as the local sponsor.

COMPARISON OF FEDERAL COST ESTIMATES: The current Federal cost estimate of $18,400,000 is the same as the latest estimate ($18,400,000) presented to Congress (FY 1995). However, adjustments were made within the estimate as follows:

Item	Amount
Price Escalation on Construction Features	- $ 6,000
Price Escalation on Real Estate	- 6,000
Total	$ 0

STATUS OF ENVIRONMENTAL IMPACT STATEMENT: The final supplemental Environmental Impact Statement was filed with the Environmental Protection Agency on 22 July 1982. Environmental assessments were made during Phase II General Design Memorandum studies, and changes were not of significant magnitude to warrant modifying the project Environmental Impact Statement.

OTHER INFORMATION: Funds to initiate preconstruction engineering and design were appropriated in FY 1986, and funds to initiate construction were appropriated in FY 1990. The congressional authorization provides for development to be implemented by the Corps of Engineers, the United States Department of Agriculture and the local sponsoring organizations. The Department of Agriculture has responsibility for construction of three flood-water control structures on the Johns Creek tributary and for implementation of a basin-wide program of land treatment for erosion and sediment control on 35,010 acres. Implementation of the plans of improvement by the Corps of Engineers and the Department of Agriculture are not dependent on each other for justification nor functioning.

APPROPRIATION TITLE: Flood Control, Mississippi River and Tributaries, AR, IL, KY, LA, MS, MO and TN - Construction

PROJECT: West Tennessee Tributaries, Tennessee (Continuing)

LOCATION: The project is located along the Obion and Forked Deer Rivers and their forks in West Tennessee, in Weakley, Madison, Gibson, Obion, Dyer, Crockett, Lauderdale and Haywood Counties, Tennessee.

DESCRIPTION: The project consists of improving 119 miles of channels of the Obion River and its principal tributaries, the North, South, Middle and Rutherford Fork; and improving 106 miles of channels of the Forked Deer and its North, South, and Middle Forks to provide adequate drainage outlets and reduce the frequency, depth, and duration of overflow. The work consists of clearing, cleanout, enlargement, and realignment of channels and construction of 7.6 miles of levee from Porter Gap to Island 25 on the Obion River. The project also includes the acquisition of 32,000 acres of fish and wildlife mitigation lands. Approximately 93 miles of channel improvement have been completed and 13,527 acres of land have been purchased for mitigation. Construction on the remaining channel items is now not implementable due to the denial of water quality certification by the state of Tennessee. All remaining project work is now programmed. The project is in the process of being shut down. Shutdown work includes project management and project planning; continued coordination with the state of Tennessee and resolving any problems that may arise during the shutdown process; real estate and environmental activities required in the turnover of the acquired mitigation lands to the state of Tennessee; stability analyses to determine required protection work for bridge and utility crossings in the uncompleted portions of the project; preparation of plans and specifications for the required protection work; and construction of the protection work. Only shutdown work for the project is programmed.

AUTHORIZATION: Flood Control Acts of 1948 and 1966 and the Water Resources Development Acts of 1974 and 1976.

REMAINING BENEFIT - REMAINING COST RATIO: 1.9 to 1 at 2-1/2 percent.

TOTAL BENEFIT - COST RATIO: 2.2 to 1 at 2-1/2 percent.

INITIAL BENEFIT - COST RATIO: 2.6 to 1 at 2-1/2 percent (FY 1960).

BASIS OF BENEFIT - COST RATIO: Benefits are from the latest available evaluation approved in August 1983 at 1983 price levels.

SUMMARIZED FINANCIAL DATA				ACCUM. PCT. OF EST. FED. COST
Estimated Federal Cost			$128,000,000	
Programmed Construction		$56,632,000		
Unprogrammed Construction		71,368,000		
Estimated Non-Federal Cost			4,520,000	
Programmed Construction		1,819,000		
Cash Contribution	$ 0			
Other Costs	1,819,000			
Estimated Non-Federal Cost				
Unprogrammed Construction		2,701,000		
Cash Contribution	0			
Other Costs	2,701,000			
Total Estimated Programmed Construction Cost			58,451,000	
Total Estimated Unprogrammed Construction Cost			74,069,000	
Total Estimated Project Cost			$132,520,000	
Allocations to 30 September 1994			$ 45,478,000	
Conference Allowance for FY 1995			2,101,000	
Allocation for FY 1995			1,235,000[2]	
Allocations through FY 1995			$ 46,713,000	36
Allocation Requested for FY 1996			$ 2,900,000	39
Programmed Balance to Complete After FY 1996			7,019,000	
Unprogrammed Balance to Complete After FY 1996			$ 71,368,000	

STATUS (1 January 1995)	PERCENT COMPLETE	PHYSICAL COMPLETION SCHEDULE
Project Shutdown	60	To be determined
Currently Approved Plan	41	Indefinite
Entire Project	60	To be determined[1]

PHYSICAL DATA

Lands and Damages	32,000 acres
Relocations	
Roads	13 bridges
Railroads	7 bridges
Channels	
Obion River	54 miles
Obion River Forks	65 miles
Forked Deer River	5 miles
Forked Deer River Forks	101 miles
Total	225 miles
Levees and Floodwalls	7.6 miles

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[1] For programmed shutdown work only; remaining work on the authorized project is unprogrammed due to project shutdown.

[2] Reflects $216,000 reduction assigned as savings and slippage; and $650,000 reprogrammed from the project.

JUSTIFICATION: The project is a flood control and drainage project and is a unit of the Comprehensive Plan for Flood Control, Mississippi River and Tributaries. The floods of record in 1935 and 1937 overflowed 455,000 acres of cleared and wooded area. This entire area will receive benefits from project construction due to accelerated flood runoff thus reducing duration of overflow periods; however, benefits will accrue upon completion of each item of construction. Project construction will also eliminate overflow during the crop season on about 239,221 acres (162,644 cleared and 76,577 wooded). The principal population centers of the drainage basin include Jackson, Dyersburg, Union City, Humboldt, Trenton, and Milan, all in Tennessee, and Fulton, Kentucky. Farming, including truck farming, stock raising and dairying, is the principal occupation throughout the basin. Construction of the project will tend to stabilize the area's predominately agricultural economy. The project is credited with redevelopment benefits, benefits from flood damages prevented and benefits from a higher land use made possible by reduced flooding. Counties within the project area that are subject to substantial and persistent unemployment: Haywood County. Total average annual benefits (October 1983 price levels) are as follows:

Annual Benefits	Amount
Flood Control	$2,007,000
Area Redevelopment	23,000
Advance Replacement	30,000
Betterments	8,000
Recreation	1,164,000
Timber	605,000
Total	$3,837,000

FISCAL YEAR 1996: The requested amount will be applied as follows:

Initiate:	
Channel Protection, Item 4B	$ 100,000
Channel Protection, Item 5	460,000
Initiate and Complete:	
Relocations, Elmore 13A SFFD 2 Powerline mile 17.1, Item 4A	1,159,000
Continue:	
Lands and Damages	8,000
Channel Protection, Item 4	636,000
Planning, Engineering and Design	220,000
Supervision and Administration	197,000
Complete:	
Channel Protection, Item 3A	120,000
Total	$2,900,000

NON-FEDERAL COST: In accordance with the Flood Control Acts of 1948 and 1966 and the Water Resources Development Acts of 1974 and 1976, the non-Federal sponsor must comply with the requirements listed below.

Requirements of Local Cooperation	Payment During Construction and Reimbursements	Annual Operation, Maintenance, and Replacement Costs
Provide lands, easements, and rights-of-way.	$4,290,000	
Modify or relocate roads not crossing the project channels where necessary for the construction of the project.	230,000	
Pay all costs of operation, maintenance, and replacement of flood control facilities.		$408,000
Total Non-Federal Costs	$4,520,000	$408,000

STATUS OF LOCAL COOPERATION: Necessary assurances were furnished by the Obion-Forked Deer Basin Authority on 2 June 1972 and were accepted on 14 June 1972. Section 221 of the Flood Control Act of 1970 (PL 91-611) is not applicable to other items of work but is required by Section 3 of the Water Resources Development Act of 1974 (PL 93-251) for the mitigation lands and for the levees authorized by the Water Resources Development Act of 1976 (PL 94-587). Assurances have not been furnished for the levees.

COMPARISON OF FEDERAL COST ESTIMATES: The current Federal cost estimate of $128,000,000 is an increase of $2,000,000 from the latest estimate ($126,000,000) presented to Congress (FY 1995). This change includes the following items.

Item	Amount
Price Escalation on Construction Features	$ 1,359,000
Price Escalation on Real Estate	641,000
Total	$ 2,000,000

STATUS OF ENVIRONMENTAL IMPACT STATEMENT: A fully coordinated Environmental Impact Statement in final form was forwarded to the Council on Environmental Quality on 4 May 1971. Court action on 2 March 1973 rejected the statement, directed revision of the statement, and stated that the revised statement was subject to District Court review. A final Environmental Impact Statement was submitted to the Council on Environmental Quality on 21 July 1975, and published in the Federal Register on 1 August 1975. The statement was determined inadequate and the injunction was continued by court decision dated 27 January 1978. A supplement to the statement has been prepared to eliminate the deficiencies identified in the Memorandum Decision of 27 January 1978. The draft supplement to the statement was provided to the public for review and to the Environmental Protection Agency for filing and review on 29 April 1982. The final supplement to the statement was forwarded to the Environmental Protection Agency on 9 February 1983. The notice appeared in the Federal Register on 25 February 1983. The Record of Decision was signed by President, Mississippi River Commission on 8 August 1983.

OTHER INFORMATION: Funds to initiate preconstruction planning were appropriated in FY 1959 and for construction in FY 1960. As the result of a lawsuit filed on 23 April 1970, the District Court found the Environmental Impact Statement to be inadequate on 2 March 1973, and enjoined any further construction. On 9 May 1985, the District Court lifted this injunction that had prohibited the Corps from working on portions of the project. Another suit was filed on 23 August 1985 which challenged the Environmental Impact Statement. The District Court denied the request for a temporary restraining order on 23 August 1985 and denied the request for a preliminary injunction on 30 August 1985. The Corps filed a Motion to dismiss the case which was granted by the Court on 5 December 1985. A Notice of Appeal was filed by the Plaintiff on 2 January 1986 to the Sixth Circuit Court of Appeals. On 13 March 1987, the U.S. Sixth Circuit Court of Appeals dismissed the appeal as an impermissible collateral attack. On 18 June 1986 Chester McConnell and Tennessee Environmental Council filed in Chancery Court of Davidson County an appeal and request for judicial review of Water Quality Control Board's final decision and order on Fowlkes Items 1-1 and 1-2 dated 8 May 1986. The Chancery Court affirmed the Board's decision and final order on 18 March 1987. Petitioners appealed to the Court of Appeals of Tennessee, Middle Section, at Nashville, App. No. 87-234-II. On 4 December 1987, the case was remanded to the Tennessee Water Quality Control Board for further findings of facts and conclusions of law in relation to the issue of "issuance of permits for projects involving a portion of the subject river without considering the effect of such projects and/or any other contemplated projects upon the entire river." The Tennessee Water Quality Control Board considered the remanded issue at a hearing on 20 January 1988. Findings of Facts and Conclusions of Law were issued by the Board after affirming their previous decision. Water quality certification for the next planned construction item, Sidonia, was denied by the Tennessee Department of Health and Environment on 18 June 1987. The Corps appealed this decision, but after numerous meetings and discussions with the State in an attempt to arrive at a mutually agreeable plan of improvement for the Sidonia Item, and with no apparent resolution forthcoming, the Corps withdrew the appeal in May 1989. The Corps will not proceed with further construction or acquisition of related mitigation lands for the authorized project until the State of Tennessee provides water quality certification and necessary rights-of-way for construction of the project. By letter dated April 10, 1992, Governor McWherter requested that the West Tennessee Tributaries project be reactivated by incorporating environmentally sensitive guidelines into its design. The state subsequently set up a steering committee composed of representatives from state and Federal agencies and local interest groups. The objective of the steering committee was, through the group discussion process, to develop a consensus plan for reformulation of the project. The committee met monthly and in the December 1994 meeting, they reached a consensus on the type of project the State would support. On April 7, 1994, representatives from the State presented the Plan to the Memphis District Commander. The consensus plan, referred to by the State as the "Mission Plan", will require a reformulation of the project to determine its feasibility and Federal interest. A limited evaluation of the Stokes Creek and the Middle Fork Forked Deer River, including Buck Creek, Demonstration Projects, included in the Mission Plan is currently underway.

MISSISSIPPI RIVER COMMISSION
JUSTIFICATION OF ESTIMATE

APPROPRIATION TITLE: Flood Control, Mississippi River and Tributaries, AR, IL, KY, LA, MS, MO, and TN, Maintenance, FY 1996

The program request of $134,188,000 provides for the day-to-day operation and ordinary maintenance, and repairs and dredging of the major features of the comprehensive project. It also consists of the revision and publication of alluvial valley maps and navigation charts. The fund requirements are based upon the normal recurring annual expenses determined from experience records during the past years, and the repair and dredging work necessary to maintain the projects in operable condition.

State Project Name	OBLIGATIONS Estimated FY 1995 ($)	 Estimated FY 1996 ($)	Reason for Change and Major Maintenance Items
	Total (Operations) (Maintenance)	Total (Operations) (Maintenance)	1. Reasons for change in Operations from FY 1995 to FY 1996(10%+/-). 2. Major Maintenance Items Budgeted in FY 1996 (Threshold $500,000).
Mississippi River Levees, AR, IL, KY, LA, MS, MO, TN	8,997,000 (1,152,000) (7,845,000)	5,630,000 (1,219,000) (4,411,000)	1. None. 2. Levee slide repairs at various locations.
Bonnet Carre, LA	785,000 (480,000) (305,000)	875,000 (610,000) (265,000)	1. Increased cooperative stream gaging. 2. None.
Mississippi Delta Region - Caernarvon, LA	403,000 (398,000) (5,000)	415,000 (415,000) (0)	1. None. 2. None.

MISSISSIPPI RIVER COMMISSION
JUSTIFICATION OF ESTIMATE

APPROPRIATION TITLE: Flood Control, Mississippi River and Tributaries, AR, IL, KY, LA, MS, MO, and TN, Maintenance, FY 1996

State Project Name	OBLIGATIONS Estimated FY 1995 ($) Total (Operations) (Maintenance)	 Estimated FY 1996 ($) Total (Operations) (Maintenance)	Reason for Change and Major Maintenance Items 1. Reasons for change in Operations from FY 1995 to FY 1996 (10%+/-). 2. Major Maintenance Items Budgeted in FY 1996 (Threshold $500,000).
Channel Improvement AR, IL, KY, LA, MS, MO, TN,			
Revetments and Dikes	42,896,000 (2,720,000) (40,176,000)	41,825,000 (2,737,000) (39,088,000)	1. None. 2. Revetment and dike repairs.
Dredging	18,453,000 (3,761,000) (14,692,000)	20,000,000 (3,820,000) (16,180,000)	1. None. 2. Dredging at various locations.
Memphis Harbor (McKellar Lake), TN	978,000 (43,000) (935,000)	1,415,000 (45,000) (1,370,000)	1. None. 2. Dredging.
Greenville Harbor, MS	432,000 (3,000) (429,000)	258,000 (3,000) (255,000)	1. None. 2. None.

MISSISSIPPI RIVER COMMISSION
JUSTIFICATION OF ESTIMATE

APPROPRIATION TITLE: Flood Control, Mississippi River and Tributaries, AR, IL, KY, LA, MS, MO, and TN, Maintenance, FY 1996

State Project Name	OBLIGATIONS		Reason for Change and Major Maintenance Items
	Estimated FY 1995 ($)	Estimated FY 1996 ($)	
	Total	Total	
	(Operations)	(Operations)	1. Reasons for change in Operations from FY 1995 to FY 1996 (10%+/-).
	(Maintenance)	(Maintenance)	2. Major Maintenance Items Budgeted in FY 1996 (Threshold $500,000).
Vicksburg Harbor, MS	200,000	223,000	
	(4,000)	(4,000)	1. None.
	(196,000)	(219,000)	2. None.
Baton Rouge Harbor (Devil's Swamp), LA	171,000	150,000	
	(9,000)	(10,000)	1. None.
	(162,000)	(140,000)	2. None.
Mapping	887,000	1,008,000	
	(887,000)	(1,008,000)	1. Additional mapping updates.
	(0)	(0)	2. None.
St. Francis Basin, AR & MO:			
Wappapello Lake, MO	4,781,000	3,601,000	
	(2,724,000)	(2,818,000)	1. None.
	(2,057,000)	(783,000)	2. None.
St. Francis River & Tributaries, AR	10,336,000	9,363,000	
	(3,461,000)	(3,900,000)	1. Increased pumping of flood water.
	(6,875,000)	(5,463,000)	2. Engine conversion at Huxtable pumping plant and levee setback at Elk Chute, MO.

MISSISSIPPI RIVER COMMISSION
JUSTIFICATION OF ESTIMATE

APPROPRIATION TITLE: Flood Control, Mississippi River and Tributaries, AR, IL, KY, LA, MS, MO, and TN, Maintenance, FY 1996

State Project Name	OBLIGATIONS Estimated FY 1995 ($) Total (Operations) (Maintenance)	 Estimated FY 1996 ($) Total (Operations) (Maintenance)	Reason for Change and Major Maintenance Items 1. Reasons for change in Operations from FY 1995 to FY 1996 (10%+/-). 2. Major Maintenance Items Budgeted in FY 1996 (Threshold $500,000).
White River Backwater, AR	1,858,000 (610,000) (1,248,000)	1,258,000 (675,000) (583,000)	1. None. 2. None.
Lower Arkansas River, AR North Bank	656,000 (20,000) (636,000)	146,000 (21,000) (125,000)	1. None. 2. None.
South Bank	104,000 (25,000) (79,000)	115,000 (25,000) (90,000)	1. None. 2. None.
Tensas Basin, AR & LA Boeuf and Tensas Rivers	2,568,000 (2,217,000) (351,000)	2,628,000 (2,278,000) (350,000)	1. None. 2. None.
Red River Backwater	2,313,000 (2,313,000) (0)	2,740,000 (2,740,000) (0)	1. Increase in cost of electrical service. 2. None.
Lake No. 9 Pumping Station, KY	33,000 (0) (33,000)	0 (0) (0)	1. None. 2. None.

MISSISSIPPI RIVER COMMISSION
JUSTIFICATION OF ESTIMATE

APPROPRIATION TITLE: Flood Control, Mississippi River and Tributaries, AR, IL, KY, LA, MS, MO, and TN, Maintenance, FY 1996

State Project Name	OBLIGATIONS Estimated FY 1995 ($) Total (Operations) (Maintenance)	Estimated FY 1996 ($) Total (Operations) (Maintenance)	Reason for Change and Major Maintenance Items 1. Reasons for change in Operations from FY 1995 to FY 1996 (10%+/-). 2. Major Maintenance Items Budgeted in FY 1996 (Threshold $500,000).
Yazoo Basin, MS			
Sardis Lake	5,835,000	4,200,000	
	(3,500,000)	(3,535,000)	1. None.
	(2,335,000)	(665,000)	2. None.
Arkabutla Lake	4,010,000	3,500,000	
	(2,900,000)	(2,988,000)	1. None.
	(1,110,000)	(512,000)	2. None
Enid Lake	4,522,000	3,500,000	
	(2,495,000)	(2,645,000)	1. None.
	(2,027,000)	(855,000)	2. None.
Grenada Lake	4,759,000	4,329,000	
	(3,400,000)	(3,583,000)	1. None.
	(1,359,000)	(746,000)	2. None.

MISSISSIPPI RIVER COMMISSION
JUSTIFICATION OF ESTIMATE

APPROPRIATION TITLE: Flood Control, Mississippi River and Tributaries, AR, IL, KY, LA, MS, MO, and TN, Maintenance, FY 1996

State Project Name	OBLIGATIONS Estimated FY 1995 ($) Total (Operations) (Maintenance)	OBLIGATIONS Estimated FY 1996 ($) Total (Operations) (Maintenance)	Reason for Change and Major Maintenance Items 1. Reasons for change in Operations from FY 1995 to FY 1996 (10%+/-). 2. Major Maintenance Items Budgeted in FY 1996 (Threshold $500,000).
Greenwood	591,000 (580,000) (11,000)	860,000 (841,000) (19,000)	1. Increased operation of Walker Lake pumping station. 2. None.
Yazoo City	599,000 (599,000) (0)	709,000 (709,000) (0)	1. Increased cost of electrical service. 2. None.
Main Stem	823,000 (823,000) (0)	1,390,000 (1,076,000) (314,000)	1. Complete mitigation plan for Tallahatchie and Yalobusha Rivers. 2. None.
Tributaries	1,449,000 (1,038,000) (411,000)	1,135,000 (1,131,000) (4,000)	1. None. 2. None.
Will M. Whittington Auxiliary Channel	365,000 (365,000) (0)	474,000 (404,000) (70,000)	1. None. 2. None.
Big Sunflower	1,725,000 (172,000) (1,553,000)	2,012,000 (243,000) (1,769,000)	1. Additional channel surveys. 2. None.

MISSISSIPPI RIVER COMMISSION
JUSTIFICATION OF ESTIMATE

APPROPRIATION TITLE: Flood Control, Mississippi River and Tributaries, AR, IL, KY, LA, MS, MO, and TN, Maintenance, FY 1996

State Project Name	OBLIGATIONS		Reason for Change and Major Maintenance Items
	Estimated FY 1995 ($)	Estimated FY 1996 ($)	
	Total (Operations) (Maintenance)	Total (Operations) (Maintenance)	1. Reasons for change in Operations from FY 1995 to FY 1996 (10%+/-). 2. Major Maintenance Items Budgeted in FY 1996 (Threshold $500,000).
Yazoo Backwater	382,000 (382,000) (0)	529,000 (454,000) (75,000)	1. Additional real estate compliance inspections. 2. None.
Old River, LA	3,156,000 (2,706,000) (450,000)	4,821,000 (2,640,000) (2,181,000)	1. None. 2. Dewatering Old River Lock and painting of lock gates.
Atchafalaya Basin, LA	6,556,000 (2,625,000) (3,931,000)	13,341,000 (4,553,000) (8,788,000)	1. Increased lock operations 2. Dewatering and painting of gates at Berwick, replace southwest guidewall and dolphins at Bayou Sorrel, dredge Berwick Bay and Three Rivers, and revetment repairs at various locations.
Lower Red River, LA	177,000 (40,000) (137,000)	77,000 (37,000) (40,000)	1. None. 2. None.
Bayou Cocodrie & Tributaries, LA	118,000 (118,000) (0)	87,000 (87,000) (0)	1. Reduction in water control management. 2. None.
Atchafalaya Basin Floodway System, LA	0 (0) (0)	206,000 (0) 206,000	1. None. 2. None.

MISSISSIPPI RIVER COMMISSION
JUSTIFICATION OF ESTIMATE

APPROPRIATION TITLE: Flood Control, Mississippi River and Tributaries, AR, IL, KY, LA, MS, MO, and TN, Maintenance, FY 1996

State Project Name	OBLIGATIONS Estimated FY 1995 ($) Total (Operations) (Maintenance)	Estimated FY 1996 ($) Total (Operations) (Maintenance)	Reason for Change and Major Maintenance Items 1. Reasons for change in Operations from FY 1995 to FY 1996 (10%+/-). 2. Major Maintenance Items Budgeted in FY 1996 (Threshold $500,000).
Inspection of Completed Works AR, IL, KY, LA, MS, MO, and TN	1,234,000 (1,234,000) (0)	1,368,000 (1,368,000) (0)	1. None. 2. None.
TOTAL	133,152,000 (43,804,000) (89,348,000)	134,188,000 (48,622,000) (85,566,000)	

POLICY IMPACTS

Mr. MYERS. First off, you have been here, I think, for every one of the sessions we have had so far concerning this new criteria proposed by the administration.

General WITHERSPOON. I missed the ones this morning, sir.

Mr. MYERS. Well, you slept in today.

What is the status in your division? How much is it going to impact you?

General WITHERSPOON. In 1996, sir, we have four potential projects that are impacted. We have one new start reconnaissance that will not proceed, the West Shore, Lake Pontchartrain, Louisiana, study.

We have two feasibility studies that will not start. One in Lafayette Parish, Louisiana, and one under the MR&T at Wolf River, Tennessee. The fourth is a feasibility study that will be completed but we have not requested preconstruction engineering and design funds because it falls under the criteria. That is the Jackson Metropolitan Area flood protection study.

INTERSTATE WATER POLICY

Mr. MYERS. Along that same line, the Atchafalaya is a navigation project, but also is a flood control project—you have both—two interests here. What is going to prevail here—it is all within Louisiana?

General WITHERSPOON. Well, the waters that are in the Atchafalaya really come out of the Red, the Mississippi, and the Ouachita and Black. All of those rivers originate in other States. From the flood protection standpoint, the criteria, I think, applies on the 50 percent rule.

There are navigation interests as well as flood control, but our primary involvement there started really with the MR&T project and flood control measures. We have a big environmental mission also in the Atchafalaya Basin now, so all of these things come into play.

Mr. MYERS. But the connection is man-made—to connect the Atchafalaya and the Mississippi. You crossed over there—I am not opposed to it, but I am just saying if you carry out criteria to the extent, I don't see how we can continue the work—except for navigation.

General WITHERSPOON. Well, the water from the Mississippi, you are right, is controlled now through a man-made structure—or structures, but before that was done, it was a natural distributary of the Mississippi River so water was flowing before that as well.

Mr. MYERS. Well, I guess historically back before even Tom Bevill came—that may be sometime way back—it was one channel down through there and it moved over and came down through—but anyway, I am concerned—again, many of us are.

RECREATION AREAS

How many recreation areas do you now operate?

General WITHERSPOON. I don't have a total number. I can tell you how many lakes.

Mr. MYERS. Would you provide that for the record?

General WITHERSPOON. There are other recreation areas on the Ouachita River, for example, that are not at a lake. So I would have to get you the total numbers on that. I don't think either one of my partners here knows that. There are a bunch of them.

Mr. MYERS. If you would, provide that for the record.

[The information follows:]

NUMBER OF RECREATION AREAS OPERATED BY THE LOWER MISSISSIPPI VALLEY DIVISION AND THE MISSISSIPPI RIVER COMMISSION

There are 327 recreation areas operated by the Lower Mississippi Valley Division and the Mississippi River Commission, of which 190 are operated by the St. Louis District, and 137 are operated by the Vicksburg District. No recreation areas are operated by the Memphis or New Orleans Districts.

MISSISSIPPI RIVER, BATON ROUGE TO THE GULF OF MEXICO

Mr. MYERS. Now, it has always been a problem maintaining the channel from below New Orleans on out to the Gulf and there is always a constant problem of erosion on the banks and you have been working on that for—even before you got there. There is always a problem of dredging.

Does that come out of the harbors maintenance trust account, that dredging below there?

General WITHERSPOON. No, sir. Well, you mean how is it funded?

Mr. MYERS. Yes. How is it funded? Does it come out of that trust account? I should know that but I don't.

General WITHERSPOON. I don't know if contributions from—I don't think from the——

Mr. MYERS. Why wouldn't that be considered part of the New Orleans Harbor? I don't know.

General WITHERSPOON. We have several ports along the Mississippi from Baton Rouge down that are deep-draft ports. Southwest Pass, I think what you are talking about, which is the last 18 to 20 miles of the river before it goes to the Gulf, has been a problem, a challenge, if you will, for maintenance dredging continually since we have had ship traffic in the Mississippi River.

I guess I don't see this policy, if that is what it is you are driving at, sir, impacting that work. I think that is going to continue. That is my understanding.

Mr. MYERS. Has to. No question about that. Mr. Bevill.

MISSISSIPPI RIVER AND TRIBUTARIES PROJECT

Mr. BEVILL. Thank you, Mr. Chairman.

General, when do you anticipate that the remaining programmed work on the Mississippi River and Tributaries project will be completed?

General WITHERSPOON. We are forecasting the year 2020 now. To make sure I got the number right, I will look over there and see what he wrote down. But 2020 is the date that we are looking at now, and some of that is driven by how quickly we expect to get rights of way to have the levees raised to their project grade.

Some of the work, stabilizing river banks, for example, is dependent on how the river develops and on not going in too quickly in some areas to do that before the river develops sufficiently to allow us to do it and not have to do it over again. But 2020 is the year, and we are over 90 percent complete, but that last 10 percent will not be completed quickly.

ATCHAFALAYA BASIN FLOODWAY SYSTEM, LOUISIANA

Mr. BEVILL. Much earlier than I anticipated. Why has the estimated Federal cost for program work on the Atchatalaya Basin Floodway System in Louisiana increased by about $21 million?

General WITHERSPOON. Twenty-one million dollars, total program?

Mr. MYERS. Really more than that if you look at all of them.

General WITHERSPOON. I don't have the answer on it.

Mr. BEVILL. Can you put that in the record?

General WITHERSPOON. I can provide that for the record.

[The information follows:]

INCREASE IN FEDERAL COST FOR PROGRAMMED WORK, ATCHAFALAYA BASIN FLOODWAY SYSTEM, LOUISIANA

The $21,000,000 cost increase for the programmed work results from a legal determination that the Corps is obligated to acquire an additional 27,000 acres of land in fee title which we previously believed would come from contributions by other agencies, more restrictive easements necessary on 338,000 acres to assure proper controls on timber harvesting, increases in administrative costs for real estate acquisition, and price level increases.

MISSISSIPPI DELTA REGION, LOUISIANA

Mr. BEVILL. Why was $4 million reprogrammed from the Mississippi Delta Region project from fiscal year 1995; $4 million?

General WITHERSPOON. That is the Davis Pond fresh water diversion project and there are a couple of reasons having to do with relocations issues, real estate issues, and some design changes that had to be made. We just could not spend the money in 1995 that we anticipated we would be able to.

Mr. BEVILL. Thank you, Mr. Chairman.

WORK FOR OTHERS

Mr. MYERS. Thank you, Mr. Chairman.

The Waterways Experiment Station is out of your jurisdiction I guess directly; isn't it?

General WITHERSPOON. We are close friends and partners but they don't work for me.

Mr. MYERS. They don't do any work for you at all?

General WITHERSPOON. They work for us but we pay them for that work—at least you pay for it.

Mr. MYERS. That introduces the next question. How much work do you do for others in your division?

General WITHERSPOON. A variety of work. We can give you the total numbers, but the biggest piece of what we would call work for others is a Superfund project at Bayou Bonfuca in Louisiana a one hundred twenty million dollar contract. That would be the biggest piece of work for others.

Mr. MYERS. Do you do any environmental cleanup other than that?

General WITHERSPOON. Projects smaller than that certainly.

Mr. MYERS. For which you are paid?

General WITHERSPOON. Yes, sir.

Mr. MYERS. But for the record, you might put that in, please.
[The information follows:]

PERFORMANCE OF WORK FOR OTHERS

The Lower Mississippi Valley Division has agreements in place to provide a wide range of support to a variety of other Federal agencies and local entities. The largest single commitment is to the Environmental Protection Agency in support of the Superfund program where we are involved in the cleanup of several sites with a total estimated cost of $173 million. These include the Bayou Bonfuca and American Creosote sites in Louisiana and the Popile site in Arkansas. The total cost of this and other work we will perform for others during fiscal year 1995 is about $75 million. Included are $13,907,000 for the Department of Defense, $48,000,000 for the Environmental Protection Agency, $11,929,000 for Other Federal Agencies, $1,042,000 for the St. Louis Cooperative Administrative Support Unit, and $168,000 for State and Local Entities.

Mr. MYERS. We have a number of other questions, which are kind of routine in nature that you have answered in the past. It is my understanding this is your last appearance before this committee. Are you going to seek other employment; is that correct?

General WITHERSPOON. Yes, sir, and let me say from a personal standpoint that I have enjoyed appearing before this subcommittee. I have enjoyed working with you over a number of years now, and several in jobs in the Corps. I think it has been a great relationship from my standpoint and I am going to miss the opportunity in the future.

Mr. MYERS. Well, we will miss you and appreciate your help through the years. How about Mr. Duncan? Is he still around?

General WITHERSPOON. Mr. Duncan is still around. He is confined now to a wheelchair and we see him occasionally and check in on him. He is hanging in there.

Mr. MYERS. If you see him, tell him hello for us. You are going to follow Bailey and Harrison.

General WITHERSPOON. I am going to get a job. I don't think they are.

Mr. MYERS. They are not accustomed to heavy lifting and those kind of things. Well, best wishes to you.

General WITHERSPOON. You don't need a senior page, anywhere?

Mr. MYERS. You are not the only ones that have to experience austerity. We all are cutting back on ours too, but we wish you well and thank you for your——

Mr. BEVILL. General, I just want to say, we appreciate the great job you have done and you have been great to work with. We wish you the best of luck. Hope you will come by and visit us.

General WITHERSPOON. Thank you, sir. I appreciate it.

Mr. MYERS. I am sure you will come back wearing a different hat. Best wishes to all of you. Thank you. Committee will stand in recess until 4:30.

[The information follows:]

QUESTIONS FOR THE RECORD FROM MR. MYERS

LOWER MISSISSIPPI VALLEY DIVISION

GENERAL INVESTIGATIONS

MISSISSIPPI RIVER-GULF OUTLET, LOUISIANA

Mr. MYERS. Why has the schedule for completion of the reconnaissance phase of the Mississippi River-Gulf Outlet, Louisiana, bank erosion study slipped by over a year?

General WITHERSPOON. Sir, the schedule for completion of the reconnaissance phase slipped because a non-Federal sponsor to cost-share in the feasibility phase has not been identified. Discussions are continuing with potential local sponsors.

MISSISSIPPI RIVER, VICINITY OF ST. LOUIS, MISSOURI

Mr. MYERS. What is the status of the Mississippi River, Vicinity of St. Louis, Missouri, study?

General WITHERSPOON. Sir, the reconnaissance report completed in March 1994 determined that none of the structural alternatives considered were economically justified. Therefore, there are no plans to continue the study into the feasibility phase. However, a non-structural alternative was identified which included formation of an Overall Harbor Planning Group. This has received support from many agencies, users and segments of the general public. We have agreed to provide the leadership in facilitating the formation of this group and are revising the reconnaissance report, accordingly.

HOT SPRINGS, ARKANSAS

Mr. MYERS. Why have no funds been requested to continue the Ouachita River Basin, Hot Springs, Arkansas, study?

General WITHERSPOON. Sir, on 9 January 1995, the Board of Directors of the city of Hot Springs, Arkansas, voted unanimously to withdraw its support for performing the geotechnical test borings required for the Corps to continue evaluation of structural alternatives being considered in the feasibility study. Accordingly, the Corps is bringing the feasibility study to an orderly conclusion using funds previously appropriated. The study will be reclassified to the inactive category in the near future. The city is currently exploring contracting with a private firm to implement a flood warning system.

OUACHITA PARISH, LOUISIANA

Mr. MYERS. What is the status of the Ouachita Parish, Louisiana, study?

General WITHERSPOON. Sir, a reconnaissance report was completed in January 1995. Reconnaissance study findings indicated that a feasible project likely exists having a benefit-cost ratio of 2.7. The report further recommended proceeding under the Continuing

Authorities program. Considering the Administration's current policies pertaining to Continuing Authorities, future actions on this project are uncertain at this time.

RED RIVER NAVIGATION, SOUTHWEST ARKANSAS

Mr. MYERS. How are the funds provided in fiscal year 1995 for the Red River, Arkansas, Navigation study being utilized?

General WITHERSPOON. Sir, fiscal year 1995 funds are being used to reevaluate the 1990 reconnaissance study to determine the feasibility and advisability of extending navigation on the Red River from the vicinity of Shreveport, Louisiana, to near Index, Arkansas. The reconnaissance report will be completed in November 1995.

NUTWOOD LEVEE, ILLINOIS

Mr. MYERS. How are the funds provided in fiscal year 1995 for the Nutwood Levee, Illinois, project being utilized?

General Witherspoon. Sir, fiscal year 1995 funds are being used to initiate a reconnaissance study to determine if construction of the authorized project would meet current needs and be economically justified. Reconnaissance study results will be used to determine if further studies are warranted.

CONSTRUCTION, GENERAL

MISSISSIPPI RIVER-GULF OUTLET, LOUISIANA

Mr. MYERS. For the Mississippi River-Gulf Outlet, Louisiana, project, why is planning, engineering, and design of the Shiplock Unit included in the MRGO Unit?

General WITHERSPOON. Sir, there is a mistake in our justification information on page 33. The amount shown for planning, engineering and design under the MRGO Unit is for that unit; it is incorrectly labeled as being for the Shiplock Unit. The planning, engineering and design amount shown for the Shiplock Unit is correct for that unit.

MISSISSIPPI RIVER SHIP CHANNEL, GULF TO BATON ROUGE, LOUISIANA

Mr. MYERS. Is Phase III of the Mississippi River Ship Channel, Gulf to Baton Rouge, Louisiana, economically justified?

General WITHERSPOON. Sir, we have not performed a separate economic analysis of the Phase III increment. This will be done when the local sponsor requests the Corps to proceed with design studies. Preliminary discussions regarding Phase III have begun with the local sponsor, the State of Louisiana.

Mr. MYERS. What is the cost of completing phase III of the project?

General WITHERSPOON. Sir, a recent detailed cost estimate for this project is not available. However, by taking the cost estimate from 1982 and inflating it to current price levels, the cost is about $480.6 million. In response to a request from the State of Louisiana, we recently completed a preliminary analysis of this estimate and have determined that the estimate included some work which probably would not be necessary today. Therefore, the $480.6 million estimated cost could decrease significantly. We are awaiting the State's review of our preliminary analysis before proceeding further. The next step, should the State so request, would be to prepare a general design memorandum for the Phase III work. This document would include a detailed cost estimate for Phase III work.

MELVIN PRICE LOCK AND DAM, ILLINOIS

Mr. MYERS. What is the total estimated cost of the Melvin Price Lock and Dam, Illinois, visitor center?

General WITHERSPOON. Sir, the total estimated cost for constructing the Melvin Price visitor center building and the interior and exterior exhibits is $2,578,000.

Mr. MYERS. Is the visitor center authorized?

General WITHERSPOON. Yes, sir.

Mr. MYERS. Will the visitor center be constructed at full Federal expense?

General WITHERSPOON. Yes, sir.

Mr. MYERS. When will the first construction contract for the visitor center be awarded?

General WITHERSPOON. Sir, the construction contract for the visitor center is scheduled for award in April 1996.

RED RIVER WATERWAY, LOUISIANA

Mr. MYERS. What work is included in the programmed and unprogrammed balances to complete the Red River Waterway, Louisiana, project?

General WITHERSPOON. Sir, the programmed balance consists of acquisition of a portion of authorized mitigation lands in the Loggy Bayou and Bayou Bodcau areas, revetment capouts, flood damage repairs in the lower 31 miles and associated design and construction management. The unprogrammed balance consists of recreation facilities in all 5 pools, remaining authorized mitigation lands, and design and construction management associated with these activities.

Mr. MYERS. Please summarize for the Committee the mitigation work that remains to be done for the Red River Waterway project along with a schedule and the cost for each element of that work.

General WITHERSPOON. Sir, Congress has authorized the Corps to acquire 26,000 acres of lands, from willing sellers, to mitigate for adverse impacts from the project. As directed, we are focusing our efforts on acquiring lands in the vicinity of the Loggy Bayou and Bayou Bodcau Wildlife Management Areas.

For mitigation lands to be acquired in the vicinity of the Loggy Bayou Wildlife Management Area, we have executed a project cooperation agreement to acquire and develop 5,000 acres. To date, 813 acres have been acquired, 542 acres are currently being processed for acquisition, and property owners have been contacted concerning 645 acres. We have been unable to identify potential willing sellers for the remaining 3,000 acres. We are continuing to look for opportunities to purchase additional lands and plan to complete all possible acquisitions from willing sellers before 1 October 1995. At present, we project that $2,908,000 will remain to be expended after 1 October 1995 to complete purchase of the balance of the 5,000 acres. Purchase of another 9,000 acres initially authorized for the project at an estimated cost of $5,357,000 is currently unprogrammed. That work will be pursued after the acquisition issues related to the Loggy Bayou area are resolved.

Negotiations with the local sponsor on a project cooperation agreement for purchase and development of 12,000 acres in the vicinity of the Bayou Bodcau Wildlife Management Area are ongoing. The agreement is scheduled to be executed in August 1995. In anticipation of execution of the agreement, we have tentatively identified 10,500 acres of potentially suitable lands which may be available from willing sellers. The total estimated Federal cost for purchase and development of the Bayou Bodcau lands is $7,795,000. The estimated cost after fiscal year 1995 is $7,198,000. A schedule for purchase of lands in the Bayou Bodcau area is being developed with the local sponsor as we negotiate provisions of the project cooperation agreement.

LAKE PONTCHARTRAIN AND VICINITY, LOUISIANA

Mr. MYERS. In fiscal year 1995, $12,500,000 was provided for the Lake Pontchartrain and Vicinity, Louisiana, project to continue construction of parallel protection on the London and Orleans Avenues outfall canals. What is the status of that work?

General WITHERSPOON. Sir, of the $12,500,000 appropriated for the Lake Pontchartrain and Vicinity, Louisiana, project, $2,500,000 was designated for continuation of construction of parallel protection along the London Avenue and Orleans Avenue Outfall Canals. The parallel protection work is well underway. Four contracts are currently under construction and two contracts have been completed. In fiscal year 1995, we have initiated one contract, are continuing one contract and will complete three contracts. In fiscal year 1996, we will complete two contracts with fiscal year 1995 programmed carryover funds. This will complete approximately 54 percent of the parallel protection work.

Mr. MYERS. Are funds included in the fiscal year budget request to continue construction of parallel protection along the London and Orleans Avenues outfall canals?

General WITHERSPOON. No, sir. The fiscal year 1996 budget request does not include funds to continue this work since the Administration's review has identified economic and policy concerns.

Mr. MYERS. What is your capability in fiscal year 1996 for the parallel protection work?

General WITHERSPOON. Sir, let me begin by stating that although project capabilities reflect the readiness of the work for accomplishment, they are in competition for available funds and manpower Army-wide. In this context, the capability amount provided here considers the project by itself without reference to the rest of the program. However, it is emphasized that the total amount proposed for the Army's Civil Works program in the President's Budget is the appropriate amount consistent with the Administration's assessment of national priorities for Federal investments and the objectives of avoiding large budget deficits and the serious adverse effect that Government borrowing is having on the national economy. In order to maintain these overall budgetary objectives, we could only utilize additional funds on individual projects and studies if offsetting reductions were taken. Having said that, the approved capability on this activity is $4 million to initiate two additional London Avenue Outfall contracts and complete one Orleans Avenue Outfall contract.

LAKE PONTCHARTRAIN AND VICINITY, JEFFERSON PARISH, LOUISIANA

Mr. MYERS. How are the funds that were provided in fiscal year 1995 for the Lake Pontchartrain and Vicinity, Jefferson Parish, Louisiana, project being utilized?

General WITHERSPOON. Sir, the funds provided in fiscal year 1995 for the Lake Pontchartrain and Vicinity, Jefferson Parish levee runoff problem are being used to develop acceptable solutions, prepare a design report and explore the need for additional local cost sharing assurances. Upon approval of the design report, we will proceed with the preparation of contract documents for construction of the drainage improvements. Currently, contract award for this work is scheduled for January 1996.

Mr. MYERS. Are funds included in the fiscal year 1996 budget request to continue that work?

General WITHERSPOON. No, sir. The total program amount of $14,561,000 for the Lake Pontchartrain and Vicinity, Louisiana, Hurricane Protection project includes the requested amount of $7,848,000 and a programmed carryover amount from fiscal year 1995 of $6,713,000. No funds for the Jefferson Parish levee runoff feature are included in the requested amount since the programmed carryover includes sufficient funds to continue this work.

Mr. MYERS. What is your fiscal year 1996 capability?

General WITHERSPOON. Sir, we have no additional capability for fiscal year 1996 for this feature. The Jefferson Parish Lakefront Drainage feature will continue with programmed carryover funds from fiscal year 1995.

CAPE GIRARDEAU - JACKSON, MISSOURI

Mr. MYERS. Have you submitted legislation that would increase the cost ceiling for the Cape Girardeau-Jackson, Missouri, project?

General WITHERSPOON. Sir, draft legislation to increase the maximum project cost limit consistent with Section 902 of the Water Resources Development Act of 1986 has been submitted by the Corps for inclusion in the next Water Resources Development Act or other legislation appropriate for that purpose.

STE. GENEVIEVE, MISSOURI

Mr. MYERS. Do you still expect to execute the project cooperation agreement for the Ste. Genevieve, Missouri, project this April?

General WITHERSPOON. No, sir. While the city of Ste. Genevieve is striving to fulfill all local obligations and has arranged financing for the construction phase, two local cooperation issues have not been resolved. One relates to the city's legal authority to purchase the lands required for the project that are outside of its jurisdiction, and the other concerns its source of funds to operate and maintain the project. The city is continuing to work on resolving the jurisdiction problems. It plans to resolve the second issue by imposing additional property taxes for use in operating and maintaining the completed flood protection works. At this time, we cannot predict when these issues will be resolved, and the project cooperation agreement cannot be executed until they are.

OPERATIONS AND MAINTENANCE, GENERAL

MISSISSIPPI RIVER - BATON ROUGE TO THE GULF

Mr. MYERS. I understand there are unusually large volumes of material to be removed from the Southwest Pass of the Mississippi River almost every year. Wouldn't it be more economical to schedule the use of private sector dredges for this work rather than deploying the McFARLAND from the Atlantic Coast where it is home-ported?

General WITHERSPOON. Sir, the majority of the dredging in Southwest Pass is accomplished by private sector hopper and cutterhead dredges. However, due to the dynamic nature of the Mississippi River and the uncertainty as to when, where, and how much shoaling will take place, the dredge McFARLAND, as well as our hopper dredge WHEELER, are needed to respond on short notice to assist other dredge plants working in Southwest Pass. In fiscal year 1994, for example, we awarded six hopper dredge contracts and one other contract for two cutterhead dredges to maintain Southwest Pass. In that same year, all private sector hopper dredges in the United States were under contract during the period the McFARLAND and the WHEELER were working in Southwest Pass. Four of the seven hopper dredges having ship channel dredging capability were working alongside the McFARLAND and the WHEELER; the remaining three were working on other Corps projects.

MISSISSIPPI RIVER COMMISSION

GENERAL INVESTIGATIONS

MISSISSIPPI DELTA, MISSISSIPPI

Mr. MYERS. Why isn't the Mississippi Delta, Mississippi, feasibility study being cost-shared?

General WITHERSPOON. Sir, cost sharing for this feasibility study is not required since it is a portion of a feasibility level study which was ongoing prior to the requirement to cost share feasibility studies.

WOLF RIVER, MEMPHIS, TENNESSEE

Mr. MYERS. What is the status of the Wolf River, Tennessee, study?

General WITHERSPOON. Sir, the reconnaissance study was initiated in October 1994 and is scheduled for completion in October 1995. Problems, needs, and opportunities have been identified and an array of preliminary alternative plans are being investigated. Consistent with the Administration's current policy, funds to continue this study into the feasibility phase are not included in the fiscal year 1996 budget.

CONSTRUCTION

MISSISSIPPI RIVER AND TRIBUTARIES PROJECT COMPLETION

Mr. MYERS. When do you anticipate that the remaining programmed work on the Mississippi River and Tributaries project will be completed?

General WITHERSPOON. Sir, the year 2020 is the date for completion of the last programmed work on the Mississippi River and Tributaries project. This completion date is greatly dependent on the local sponsors' ability to provide rights-of-way. Currently, the Mississippi River and Tributaries project is nearly 90 percent complete.

MISSISSIPPI RIVER LEVEES, TIPTONVILLE, TENNESSEE, LEVEE EXTENSION

Mr. MYERS. In fiscal year 1995, $1,000,000 was provided to extend the Tiptonville-Obion segment of the Mississippi River levee in the vicinity of Tiptonville, Tennessee. What is the status of that work?

General WITHERSPOON. Sir, design work is currently underway and nearing completion for the levee extension and related drainage work. Coordination with the local sponsor indicates that there should be no problems in acquiring the required rights-of-way. Our current schedule calls for initiating construction in July 1995, with completion scheduled in September 1997.

ATCHAFALAYA BASIN, LOUISIANA

Mr. MYERS. The amount requested for planning, engineering, and design for the Atchafalaya Basin, Louisiana, project is about $2,500,000 above the amount requested last year. Please justify this large increase.

General WITHERSPOON. Sir, since we prepared our fiscal year 1995 budget request, the planning, engineering and design requirements for this project have increased significantly for both fiscal year 1995 and fiscal year 1996. This increase is due to a rescoping of the Lower Atchafalaya Basin Reevaluation study, emergency work at Six Mile Lake and Wax Lake Outlet Weir, and hydrographic mapping requirements.

Mr. MYERS. Do you currently have adequate real estate interests to permit you to utilize the Atchafalaya Basin floodway?

General WITHERSPOON. Yes, sir, we have adequate real estate interests to use the floodway for flood control purposes. However, at present, we only have flowage easements on 9,000 of 68,000 acres of land that would be damaged by full operation of the floodway. Compensation would have to be paid for damages occurring on the other 59,000 acres as a result of floodway operation. We are presently in the process of acquiring flowage easements on the remaining 59,000 acres.

MISSISSIPPI DELTA REGION, LOUISIANA

Mr. MYERS. Why was $4,000,000 reprogrammed from the Mississippi Delta Region, Louisiana, project in fiscal year 1995?

General WITHERSPOON. Sir, $4,000,000 was reprogrammed from the Mississippi Delta Region, Louisiana, project due to a delay in the award of the diversion structure contract. Refusal by the railroad companies and most of the utility owners to execute cost-reimbursement relocation agreements for the project required condemnation procedures for the relocations. This caused a delay in the project schedule.

MISSISSIPPI-LOUISIANA ESTUARINE AREAS, MISSISSIPPI AND LOUISIANA

Mr. MYERS. Why was $4,025,000 reprogrammed from the Mississippi-Louisiana Estuarine Areas, Mississippi and Louisiana, project in fiscal year 1995?

General WITHERSPOON. Sir, project construction was scheduled for initiation in fiscal year 1995; however, it has been delayed in order to perform a reanalysis of the authorized project by a joint task force of Federal, State and local interest organizations. This delay resulted in surplus funds which were reprogrammed from the project.

Mr. MYERS. Why has it become necessary to undertake an extensive reanalysis of this project?

General WITHERSPOON. Sir, the reanalysis, led by the Environmental Protection Agency, is being undertaken in response to requests from local interests and public officials in the area. The reanalysis has been a team effort. The joint task force includes representatives from the Environmental Protection Agency, the Corps of Engineers, the States of Louisiana and Mississippi, the Coalition to Restore Coastal Louisiana and the Lake Pontchartrain Basin Foundation, with additional input from local university professors. On 3 November 1994, the reanalysis team requested that the Corps consider altering the design and the plan of operation for the authorized project to reduce the volume of fresh water the project would divert into Lake Pontchartrain, alter the timing of the water releases, maximize the amount of water released through surrounding wetland areas, and analyze other possible actions to address the salinity problem in Lake Pontchartrain. We are currently evaluating this request.

YAZOO BASIN, MISSISSIPPI, BELZONI BRIDGE

Mr. MYERS. In fiscal year 1995, $640,000 was provided for the removal of the Belzoni Bridge as part of the Yazoo Basin, Mississippi project. What is the status of that work?

General WITHERSPOON. Sir, plans and specifications for the bridge removal are being prepared. The bridge removal contract is scheduled to be awarded in July 1995 and completed in November 1995.

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